



Contract Plans and Estimate Preparation and Review Course

**WSDOT Development Division
October 2019**

CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE

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INTRODUCTION

Welcome to the Contract Plans and Estimation Preparation and Review course. This course explains basic WSDOT contract plans review principles.

ABOUT THIS COURSE

After completing this course, learners should be comfortable with the process for reviewing contract plans and estimates.

Major training topics include:

- Policies and regulations concerning plans preparation
- Relevant WSDOT manuals
- Components of a plan set
- Example sheets

POLICIES

Policies come from the following sources:

1. State laws
2. Federal laws
3. Requests from other offices within WSDOT
4. FHWA rules and guidelines
5. Requests from Contractors through the Associated General Contractors (AGC)
6. Employee suggestions
7. Methods that have evolved and proven effective over time
8. Consultants

WHO USES THE CONTRACT PLANS?

1. Contractor
2. Subcontractors
3. Agents
4. Suppliers
5. PE Office
6. Regional Office
7. Headquarters
8. Consultants
9. FHWA
10. Final Records
11. Contract Claims
12. Contract Lawsuits
13. Public Lawsuits
14. Private Developers
15. Cities
16. Counties

REFERENCE MATERIAL

The information in this manual is for instructional purposes only and does not supersede the current version of any associated manual or directional document.

Contract Plans and Estimate Preparation and Review Course

The following manuals and resources are used in the preparation of Contract Plans:

Plans Preparation Manual	The Plans Preparation Manual is a guide to provide policies, procedures, methods, and the standard to be used in developing and preparing Right of Way, Sundry Site, Reclamation and Contract Plans.	
Electronic Engineering Data Standards (EEDS) Manual	The Electronic Engineering Data Standards manual provides standard deliverable requirements for electronic CAD and engineering data including folder structure, file naming conventions and symbologies.	
Standard Plans	The Standard Plans are details of specific construction features. They save time and money when they are used to develop the Contract Plans, and the standard designs save construction money.	
Standard Specifications	The Standard Specifications are the building codes for road and bridge construction. Follow them closely during the preparation of the Contract Plans to avoid conflicts among the Plans, Special Provisions and Standard Specifications.	
Amendments	The Amendments are no longer used.	
General Special Provisions (GSPs)	The General Provisions are a collection of Special Provisions that are used in projects.	
Hydraulics Manual	The Hydraulics Manual is a guide to the acceptable procedures and methods for developing hydraulic designs. This includes the criteria for drainage design, acceptable pipe alternates, and maximum heights of cover for the various types of pipes.	
Highway Runoff Manual	The Highway Runoff Manual establishes minimum requirements for handling highway runoff, and provides technical and uniform guidance for the avoidance and mitigation of water resource impacts on the highway system.	
Design Manual	The Design Manual is a guide to policies, procedures, and methods for developing and documenting the design of improvements to the transportation network.	
Construction Manual	The Construction Manual is a guide to acceptable procedures and methods to be used in the construction of a highway project. Although the Construction Manual is a tool for the engineer during the construction phase of the project, the designer must take care to avoid specifying work that conflicts with Construction Manual instructions.	
Standard Item Table	The Standard Item Table is not a list of all of the standard items. It is a computer listing of commonly used items that have been assigned a code number and are being tracked through the estimate system for the Unit Bid Analysis (UBA).	
Directional Documents	E = Executive Order P = Policy Statement	IL = Instructional Letter D = Directive

DRAFTING REQUIREMENTS

Computer Aided Drafting, or CAD, is one of the most important parts of plan preparation. Standardized and consistent use of symbols is crucial for a successful project. PS&E plan sheet deliverable size is 11" x 17"; the sheets must be legible and compliant to Plans Preparation Manual and Computer Aided Engineering standards. The Right of Way plan sheet deliverable size is 22" x 36".

Required information placed on each sheet will be in accordance with the Plans Preparation Manual; Division 1 for Right of Way, Division 4 for PS&E. Element placement in actual electronic files is an important consideration and should be done so as to minimize the clutter in data (base) files, and placing most text annotation in sheet files. Multiple base files may be necessary to efficiently maintain discipline data. Only pertinent text annotation should be in the sheet files.

The minimum CAD letter size on PS&E sheet is 0.07 inches. For Right of Way plans, the minimum text size is 0.10" for existing annotation and 0.12" for new text. Make sure that all lettering and dimensioning are readable from either the bottom or right side of the Plan sheet. Avoid crossed leader and arrow lines as well as notes or leader information that is written over other information. Use appropriate levels and file references.

Elements will be placed on the appropriate level in accordance with the Deliverables 7 Drafting and Plans Preparation section in the Electronic Engineering Data Standards (EEDS) Manual. Make sure that when the plan sheets are printed, the appropriate levels are turned on.

Do not provide too much information on a plan sheet. If the work is not clearly shown, the Contractor has to interpret the information, and the associated risk of an incorrect interpretation could result in higher bids.

The plan sheet scale should be appropriate for the information being shown. As a general rule, the following should provide an adequate scale:

Intersection Plan for Approval	1:50
Interchange Plan for Approval	1:100
PS&E typical plan sheet	1:100
Right of Way plan sheet	1:50
Strip map/plan	1:1000
Vicinity Map	1:2000
Roadway Profile	
Horizontal	Equal to plan scale
Vertical	1/10 of horizontal scale
Drainage Profile	
Horizontal	1:100
Vertical	1/10 of horizontal scale

Use the standard symbols shown in the EEDS Manual for drafting the plans.

Per Division 1 and Division 4 of the Plans Preparation Manual, each plan-view sheet will have a scale bar, north arrow, and show Township and Range information. Label the Township or Range lines. If these lines do not appear on the Plan sheet, the Township and Range information will be placed at the top of the sheet in the following format:

T. XX, R. XX, WM.

A legend will be provided on all plan view sheets except for the Vicinity Map. The legend will show all symbols required for the plan, or set of plans (site preparation, drainage, channelization, etc.), being represented.

Contract Plans and Estimate Preparation and Review Course

Equations will be shown on all plan sheets that depict the area of the equation. Equations include the following:

1. Linear stationing: $\underline{L\ 14+50.000\ BK =}$
L 14+70.000 AHD
2. Linear bearing: N 12° 15' 30" E BK = N 12° 16' 00" E AHD

The linear bearing equation is to be shown on the line as any other bearing would be shown. It is not to be shown at a single point on the line. Showing it at a single point indicates that it is an angle point occurring at that point.

3. Offsets: $\underline{A\ 10+00.000 =}$
L 14+50.000 (12' Lt.)
4. Intersections: $\underline{B\ 10+00.000 =}$
L 14+75.000

Stationing, line identification, and tic marks shall be shown on all construction centerlines. Bearings shall be shown on all construction centerlines on the alignment plan. Line identification, stationing and bearings shall be written consistent with the direction of the stationing.

PLAN SEQUENCE

The **Plans Preparation Manual** [Division 4](#) has a complete self-explanatory listing of the PS&E plan sequence.

Each major type of work is typically broken out into four basic sheet types in this order:

- Quantity Tabs/ Structure Notes/ Schedules
- Plan view sheets
- Profile view sheets
- Details

Quantity Tabulation Sheets are to be broken up and placed directly before the sheets containing the tabulated items. For example, if you have removal or site preparation items, they will be tabulated on Quantity Tabulation Sheets and placed just before the Site Preparation plans. Guardrail and barrier items, pavement markings, and retaining walls will each be tabulated on Quantity Tabulation Sheets and placed directly before the plans that contain the items.

You may have a few additional sheets with this procedure, but the proximity of the item tabulation to the plans is easier to follow. This is particularly true for larger projects; if the Quantity Tabulation Sheets are broken up, the volumes could be separated from the corresponding items on the plan sheets.

Use this same procedure for Structure Note Sheets when you have drainage, utilities and irrigation plans. The Structure Note Sheets for each of these areas would be placed directly before the plans showing the location of the work.

Plan, profile, and to a lesser degree, detail sheets may in some cases be combined, such as plan/profile sheets or plan/detail sheets.

INDEX

An index is required for all projects with 30 or more plan sheets and recommended for others. If the Contract Plans have more than 225 sheets, they will need to be separated into volumes per the Plans Preparation Manual, with no volume having more than 225 sheets or pages.

Use meaningful sheet titles on the index. These titles should match the sheet title. "Misc. Details" is not a meaningful title. If a sheet has both guardrail and drainage details, the sheet should be titled "Guardrail

and Drainage Details”, with that title appearing on the index.

Use reference sheet numbering on all projects. The reference sheet numbers are assigned then the sheets are developed. This allows you to complete the quantity tabulation notes, structure notes and sheet cross-referencing early during the design. If you use the plan sheet numbers, you will need to wait until you know exactly how many plan sheets you have before you can complete the quantity tabulation notes, structure notes and sheet cross-referencing.

Example Sheet Reference System

Type	Description	Type	Description
IN	Index	EM	Environmental
VM	Vicinity Map	IR	Irrigation
SQ	Summary of Quantities	PV	Paving
RC	Reclamation, Borrow, Pit,	MK	Pavement Marking
SU	Staged Construction	MD	Miscellaneous Details
RS	Roadway Sections	ST	Structures/Minor
SP	Site Preparation	IL	Illumination
EU	Existing Utilities	SG	Signals
AL	Alignment	IT	Intelligent Traffic
RW	Right of Way	EL	Electrical
CN	Contour Grading	SN	Signing
GS	Grading Sections	BG	Bridges
EC	Temporary Erosion Sediment	BU	Building Plans and
QT	Quantity Tabulations	TC	Traffic Control
RP	Roadway Profiles	DU	Detour Routes and
DR	Drainage Plans	AP	Approval Plan
DP	Drainage Profiles	CT	Control for Survey
DD	Drainage Details	EX	Existing
SN	Structure Notes	IC	Interchange Contour
UT	Utilities	RM	Record of
UP	Utilities Profile	RV	Record of Survey
LS	Landscape		

VICINITY MAP

The following information will be shown on the Vicinity Map:

- A. Project Limits
 - 1. Federal Aid Number (if applicable)
 - 2. SR Number
 - 3. Mile Post
 - 4. Stationing with Line Designation (LL 178+98.000)
- B. Construction Limits
 - 1. SR Number (if applicable)
 - 2. Mile Post (if applicable)
 - 3. Stationing with Line Designation (FR 78+00.000)
- C. Equations
- D. Distance in miles from the ends of the project to the nearest city or town
- E. Label County Roads and City Streets
- F. Haul Roads
- G. Detours
- H. Material Sites
- I. Waste Sites
- J. Note bridges that are “Included in the Project” or “Not Included in the Project”
 - 1. For Bridges Included in the Project
 - a. Bridge Number
 - b. Name of what is being crossed: Water, Road, Railroad
 - 2. Include the Bridge Number for bridges not included in the project
- K. Railroads (Named)
- L. Scale Bar
- M. North Arrow

Wetlands and Wetland Mitigation areas can be shown on the Vicinity Map.

BEGIN/END OF PROJECT

The Begin and End of Project are defined as those points where the mainline traveled way paving begins and ends. If there is no mainline traveled way paving, the Begin and End of project will be the points where the first and last permanent work are to be performed on the project.

If the Begin and End of Project points are defined by the mainline traveled way paving, any permanent work being performed outside of these paving limits is to be identified as Begin and End of Construction.

Sometimes there are paving exceptions that can be shown as begin and end paving, but these will always fall within the Begin and End of Project limits.

If the entire project is for only one SR (State Route), but has breaks in the areas where work is to be performed, these breaks should be labeled as “exceptions”. If there are numerous exceptions, an alternate method of showing exceptions is to use sections to label the areas where work is to be performed.

If the entire project is region-wide, where the work being performed is on multiple SR's, the work must be broken into sections.

A REMINDER WHEN USING SECTIONS

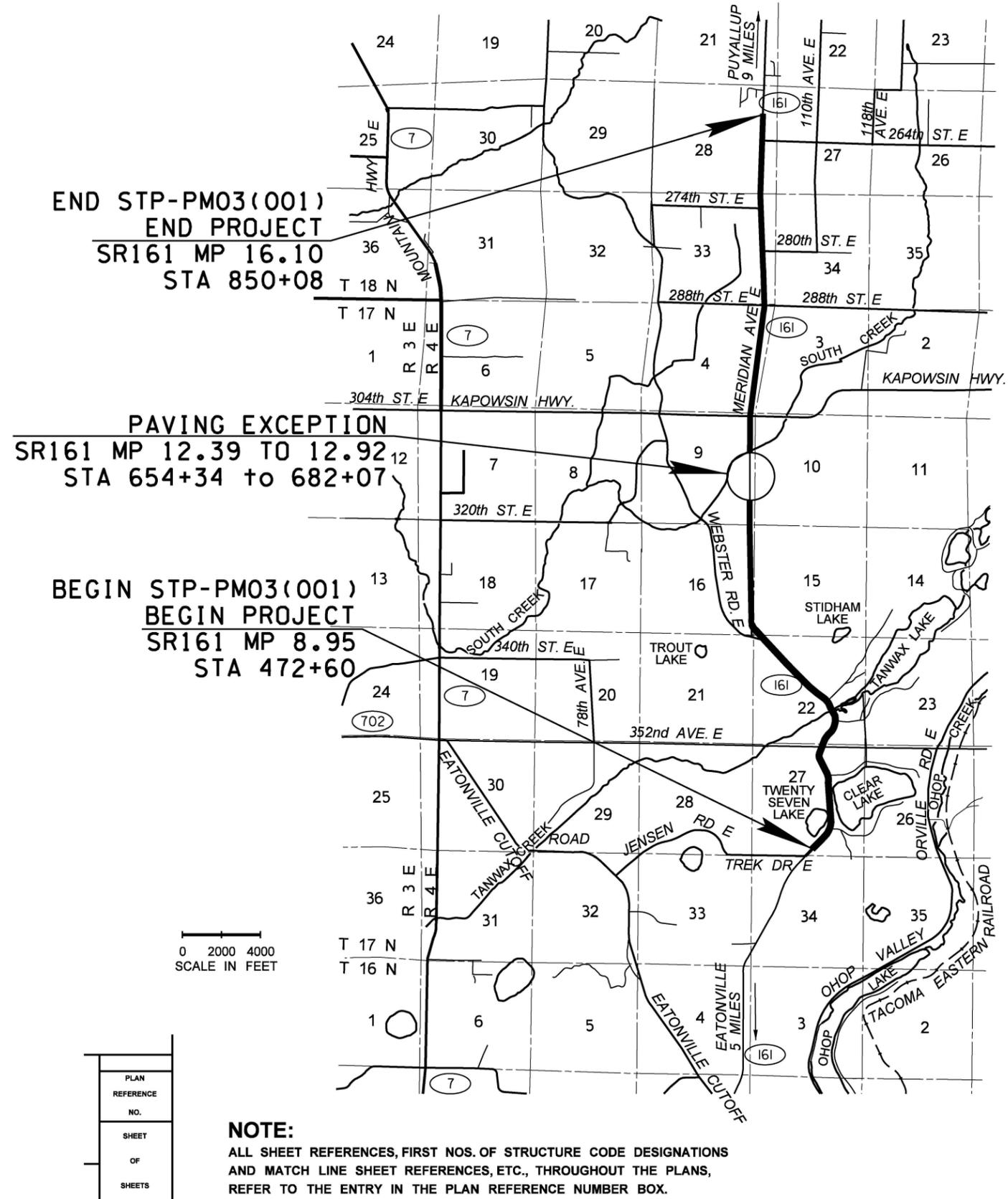
All work throughout the Plans (Summary of Quantities, roadway Sections, Quantity Tabulation Sheets, Structure Note Sheets, Profiles, etc.) must be coordinated and correspond to the section breakouts.

INDEX

SHEET NO.	PLAN REFERENCE NO.	TITLE
1	VM1	INDEX/VICINITY MAP
2-3	SQ1-SQ2	SUMMARY OF QUANTITIES
4	RS1	ROADWAY SECTIONS
5-6	PV1-PV2	PAVING AND PAVEMENT MARKING
7-8	RA1-RA2	ROAD APPROACH DETAILS
9	PL1	PLANING DETAILS
10	PD1	PAVING DETAILS
11-16	QT1-QT6	QUANTITY TABULATION-TRAFFIC
17	MD1	PAVEMENT MARKING DETAILS
18	MD1	MONUMENT DETAILS
19	DL1	DETECTOR LOOP REPLACEMENT PLAN
20-23	SS1-SS4	SIGN SPECIFICATIONS
24-25	S1-S2	SIGN PLANS
26	AV1	ADVANCED WARNING SIGN PLAN
27-39	TC1-TC13	TRAFFIC CONTROL PLAN

Notes to the Reviewer:

- 1) This is an example of combining the index and vicinity map on a small project.
- 2) For any contract that consists of 30 or more plan sheets, an index is required.
- 3) The Federal Aid Number is required on the first sheet of the plans, whether it is the index or vicinity map.
- 4) Plan reference nos. shall not be repeated.



FILE NAME	F:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F002.0_PS_VM.dgn		
TIME	11:27:34 AM		
DATE	9/18/2013		
PLOTTED BY	HIIICI		
DESIGNED BY	DESIGNER		
ENTERED BY	CAD OPERATOR		
CHECKED BY	TEAM LEADER		
PROJ. ENGR.	PROJECT ENGINEER		
REGIONAL ADM.	REGIONAL ADM.		
REVISION	DATE	BY	
REGION NO.	STATE	FED.AID PROJ.NO.	
10	WASH	NH-0000(000)	
JOB NUMBER	CONTRACT NO.	LOCATION NO.	
00Z000		XL-1234	



**Washington State
Department of Transportation**

DATE _____
P.E. STAMP BOX

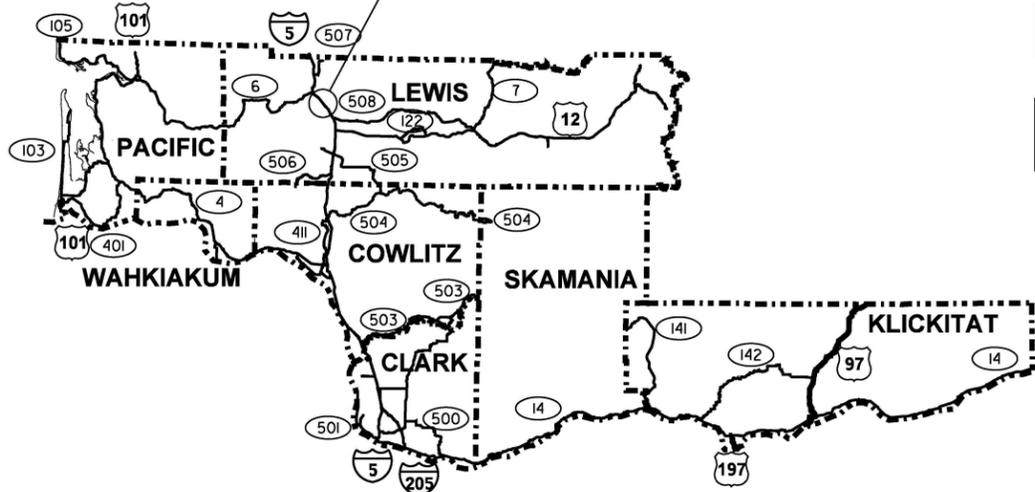
**CONTRACT PLANS AND ESTIMATE
PREPARATION AND REVIEW COURSE
FIGURE 2**

INDEX / VICINITY MAP

PLAN REF NO	VM1
SHEET	
OF	
SHEETS	

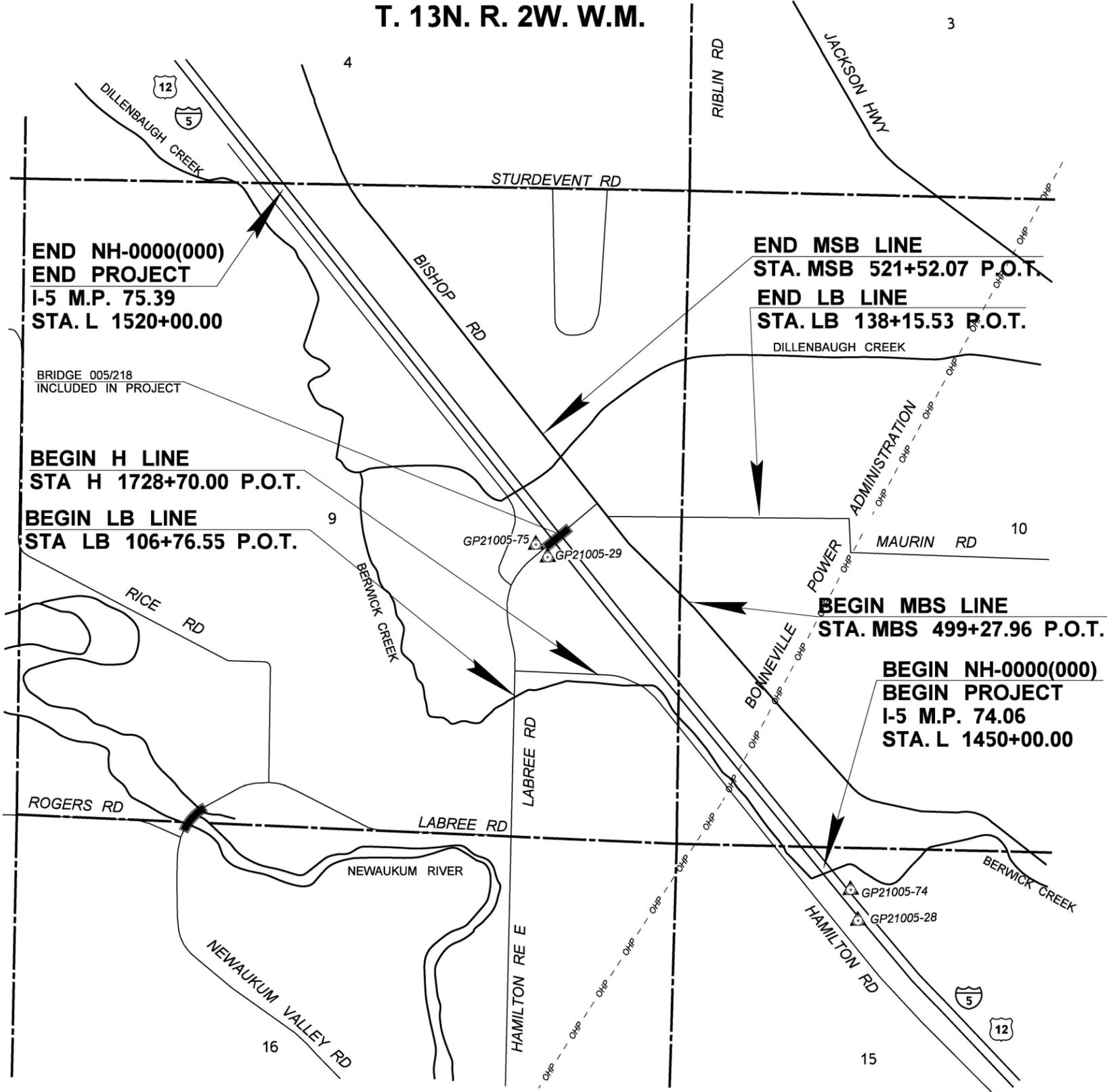
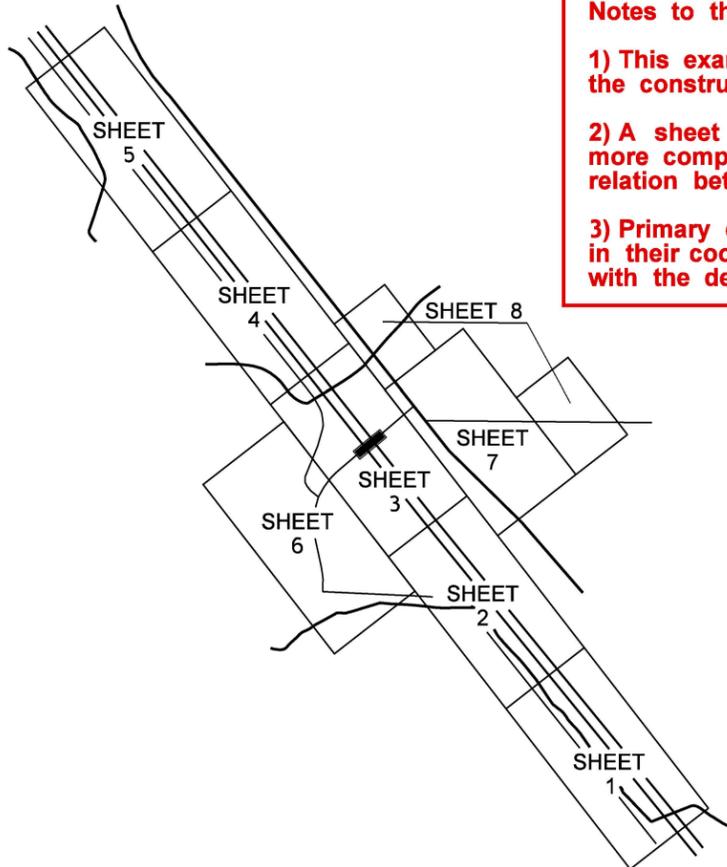
T. 13N. R. 2W. W.M.

PROJECT AREA



SOUTHWEST REGION

- Notes to the Designer:**
- 1) This example uses a blow-up to show the construction limits.
 - 2) A sheet map can be very useful on more complex contract to identify the relation between plan sheet locations.
 - 3) Primary control points are displayed in their coordinate location and labeled with the designation ID only.



FILE NAME	c:\users\hillclpw_wsdot\0260152\PPM_Div_4_Example_4-3.dgn			REGION NO.	STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	EXAMPLE 4-3	Plot 1
TIME	9:39:26 AM			10	WASH	NH-0000(000)			PLAN REF NO VM1
DATE	12/26/2019			JOB NUMBER				SHEET	
PLOTTED BY	hillcl			CONTRACT NO.				OF	
DESIGNED BY	DESIGNER			LOCATION NO.				SHEETS	
ENTERED BY	CAD OPERATOR								
CHECKED BY	TEAM LEAD								
PROJ. ENGR.	PROJECT ENGINEER								
REGIONAL ADM.	REGIONAL ADM.								
	REVISION	DATE	BY						

SUMMARY OF QUANTITIES

Quantities must match exactly the sum of the quantities from the various sheets in the plans. All rounding is done when the individual quantities are placed in the plans, not after they have been totaled and brought forward to the summary.

The general rules for rounding are as follows:

1. Items with an estimated unit bid price of \$9.99 or less are to be rounded to the nearest 10 units.
2. Items with an estimated unit bid price between \$10 and \$99.99 are to be shown to the nearest 1 unit.
3. Items with an estimated unit bid price of \$100 or more are to be shown to the nearest 0.1 units.

The exception to the rounding rules are earthwork items, where no matter what the estimated unit bid price, the quantities should be rounded to the nearest 10 units for each entry on the profiles. If the project has extremely large earthwork quantities, they could be rounded to the nearest 50 units for each entry on the profiles.

A separate group is required whenever:

- There is a change in Program Item Number (PIN)
- There is a change in program or subprogram (I2, P1, P2, and so on).
- There is a change in funding: any change in funding participants, their individual participation rates, or their source of funding. Funding participants may be the FHWA, a state agency or other public agencies, a county, a city, or private organization.
- There is a change in control section

A separate state-funded group (one per project) is required for third-party damages. The bid item "Reimbursement for Third Party Damages" is included in this group; it will be a minimum of \$5.00.

Determine group breakouts early in the design to ensure that quantity calculations represent the totals in the appropriate groups.

Bid items shall appear in the Summary of Quantities in the order that they appear in the Standard Item Table, regardless of the numerical value of the Standard Item Number. Place non-standard items on the Summary of Quantities in the logical location between standard items that they would appear between if they were on the Standard Item Table.

Each group must have at least one column associated with it. Additional columns within a group are required for the following:

1. Each bridge and structural retaining wall - those covered in Section 6-11 of the Standard Specifications - shall have its own column in order to identify materials quantities required to construct this item.
2. Each state-furnished pit site (mandatory or not) shall have its own column.

The designer may add columns to help describe the project by showing how the quantities are distributed within a group. For example, under Group 1 or a project to construct an interchange, only one column may be required, however, the designer may choose to have columns under Group 1 for the main line, each ramp, and the cross-street. By doing so, the quantities for all items associated with each line are clearly shown. This will make it easier for the Contractors to bid the project and easier for the construction office to track and identify over and under runs.

SUMMARY OF QUANTITIES

DOT_RGG900

10/3/2013

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION 1-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION 1-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 2	GROUP 3	GROUP 3	GROUP 4			
							FR LINE 4+23.00 TO 25+02.00	MKT LINE 20+00.00 TO 25+28.00	FRD LINE 10+00.00 TO 27+06.17	RETAINING WALL 1	RETAINING WALL 2	RETAINING WALL 3	RETAINING WALL 4	MKT LINE 25+28.00 TO 31+54.00	FSC LINE 19+65.60 TO 22+37.00	BNA LINE 80+00.00 TO 83+62.00	RETAINING WALL 5	FRANCIS UNDER XING	REIMBURS. FOR THIRD PARTY DAMAGE		
PREPARATION																					
1	LUMP SUM	LUMP SUM	LUMP SUM	0001	L.S.	MOBILIZATION	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.			
2	0.20	0.20		0025	ACRE	CLEARING AND GRUBBING	0.10						0.10								
3	37.00	37.00		0049	EACH	REMOVING DRAINAGE STRUCTURE	26.00	4.00					7.00								
4	LUMP SUM	LUMP SUM		0050	L.S.	REMOVAL OF STRUCTURE AND OBSTRUCTION	L.S.						L.S.								
5	200000.00		200000.00	0256	DOL	REMOVING SHAFT OBSTRUCTIONS														200,000.00	
6	LUMP SUM		LUMP SUM	0071	L.S.	REMOVING EXISTING BRIDGE NO. 480000852														L.S.	
7	40.00	40.00		0100	S.Y.	REMOVING CEMENT CONC. SIDEWALK	20.00	10.00	10.00												
8	546.00	546.00		0150	S.Y.	REMOVING TRAFFIC ISLAND			546.00												
9	1640.00	1640.00		0170	L.F.	REMOVING GUARDRAIL	1,640.00														
10	4.00	4.00		0182	EACH	REMOVING GUARDRAIL ANCHOR	4.00														
11	1020.00	1020.00		0187	L.F.	REMOVING PAINT LINE			1,020.00												
12	1850.00	1850.00		0203	S.F.	REMOVING PAINTED CROSSWALK LINE			1,850.00												
13	90.00	90.00			L.F.	REMOVING PAINTED STOP LINE			90.00												
14	2440.00	2440.00		0220	L.F.	REMOVING CHAIN LINK FENCE	2,250.00	50.00					140.00								
15	LUMP SUM	LUMP SUM		0250	L.S.	REMOVAL AND DISPOSAL OF ASBESTOS MATERIAL							L.S.								
GRADING																					
16	57400.00	57400.00		0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	45,600.00	1,900.00	2,900.00				6,600.00		400.00						
17	20500.00	20500.00		0470	C.Y.	EMBANKMENT COMPACTION	14,500.00	100.00	4,700.00				800.00		400.00						
DRAINAGE																					
18	1220.00	1020.00	200.00	1160	L.F.	UNDERDRAIN PIPE 6 IN. DIAM.	250.00			40.00	40.00	70.00	620.00				200.00				
STORM SEWER																					
19	39.00	39.00		3090	EACH	CATCH BASIN TYPE 4	21.00	11.00					7.00								
20	1.00	1.00		3091	EACH	CATCH BASIN TYPE 1	1.00														
21	3314.00	3314.00		3151	L.F.	TESTING STORM SEWER PIPE	1,840.00	744.00					730.00								
22	2668.00	2668.00		3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	1,582.00	570.00					516.00								
23	646.00	646.00		3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	258.00	174.00					214.00								
24	4.00	4.00			EACH	POND CONC. PAD	3.00						1.00								
25	1.00	1.00			EACH	POND OUTFALL	1.00														
STRUCTURE																					
26	10900.00	3900.00	7000.00	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL				200.00	200.00	300.00	3,200.00				2,300.00	4,700.00			
27	1830.00		1830.00	4007	C.Y.	SOIL EXCAVATION FOR SHAFT INCLUDING HAUL														1,830.00	
28	LUMP SUM		LUMP SUM	4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - FRANCIS AVE BR														L.S.	
29	LUMP SUM		LUMP SUM	4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 1												L.S.			
30	LUMP SUM		LUMP SUM	4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 3						L.S.									
31	LUMP SUM		LUMP SUM	4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 4						L.S.									
32	LUMP SUM		LUMP SUM	4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 5						L.S.									
33	LUMP SUM		LUMP SUM		L.S.	SHORING CL. A - RETAINING WALL 2					L.S.										
34	517.00		517.00	4020	L.F.	FURNISHING & PLACING TEMP. CASING FOR 8'-0" DIA. SHAFT														517.00	
35	130.00		130.00	4027	L.F.	FURNISHING PERMANENT CASING FOR 8'-0" DIA. SHAFT														130.00	
36	13.00		13.00	4034	EACH	PLACING PERMANENT CASING FOR 8'-0" DIA. SHAFT														13.00	
37	336.00		336.00	4039	L.F.	CASING SHORING														336.00	
38	331100.00		331100.00	4149	LB.	ST. REINF. BAR FOR BRIDGE														331,100.00	
39	325000.00		325000.00	4152	LB.	ST. REINF. BAR FOR SHAFT														325,000.00	

GROUP LEGEND :

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	000	3200CT	*	STATE,FEDERAL,AVISTA UTB 1032
2	000	3200CY	*	STATE,FEDERAL,AVISTA UTB 1032
3	395	321101	**	STATE,FEDERAL,AVISTA UTB 1032
4	395	321101	**	STATE

04/20/12	MULTIPLE ITEMS ADDED TO SPEC 1-07.2(2)	LK	REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 3 SUMMARY OF QUANTITIES	SQ1
04/27/12	COLUMN 3 CHG TO GRP 2, COLUMN 8 .9 CHG TO GRP 1	LK	10	WA	NH-0395(098)			SHEET 3 OF
05/02/12	QUAN CHNG BID ITEMS: 5, 27, 34, 35, 38, 39, 40, AND 42	LK						215 SHEETS
DATE	REVISION	BY			000000			

SUMMARY OF QUANTITIES

DOT_RGG900

10/3/2013

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION 1-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION 1-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 2	GROUP 3	GROUP 3	GROUP 4					
							FR LINE 4+23.00 TO 25+02.00	MKT LINE 20+00.00 TO 25+28.00	FRD LINE 10+00.00 TO 27+06.17	RETAINING WALL 1	RETAINING WALL 2	RETAINING WALL 3	RETAINING WALL 4	MKT LINE 25+28.00 TO 31+54.00	FSC LINE 19+65.60 TO 22+37.00	BNA LINE 80+00.00 TO 83+62.00	RETAINING WALL 5	FRANCIS UNDER XING	REIMBURS. FOR THIRD PARTY DAMAGE				
40	5180.00		5180.00	4164	L.F.	CSL ACCESS TUBE																5,180.00	
41	1810.00		1810.00	4322	C.Y.	CONC. CLASS 4000 FOR BRIDGE																	1,810.00
42	1210.00		1210.00	4168	C.Y.	CONC. CLASS 4000P FOR SHAFT																	1,210.00
43	3210.00		3210.00	4269	L.F.	PRESTRESSED CONC. GIRDER W53DG																	3,210.00
44	7500.00		7500.00	4269	L.F.	PRESTRESSED CONC. GIRDER W41DG																	7,500.00
45	-1.00		-1.00	4219	DOL	DEFICIENT STRENGTH CONC. PRICE ADJUSTMENT																	-1.00
46	LUMP SUM		LUMP SUM	4300	L.S.	SUPERSTRUCTURE - FRANCIS AVE OVER US 395 & BNSF BRIDGE																	L.S.
47	1010.00		1010.00	4410	L.F.	BRIDGE RAILING TYPE WIRE FABRIC FENCE (CURVED)																	1,010.00
48	1046.00	1046.00		4410	L.F.	BRIDGE RAILING TYPE WIRE FABRIC FENCE (VERTICAL)	422.00			18.00	18.00	30.00	558.00										
49	1756.00	746.00	1010.00	4410	L.F.	BRIDGE RAILING TYPE SNOW FENCE	122.00			18.00	18.00	30.00	558.00										1,010.00
50	1010.00		1010.00	4114	L.F.	TRAFFIC PEDESTRIAN BARRIER																	1,010.00
51	1010.00		1010.00	4117	L.F.	PEDESTRIAN BARRIER																	1,010.00
52	300.00	300.00		4123	L.F.	GEOSYNTHETIC RETAINING WALL PEDESTRIAN BARRIER	300.00																
53	746.00	746.00			L.F.	GEOSYNTHETIC RETAINING WALL COMBINATION BARRIER	122.00			18.00	18.00	30.00	558.00										
54	9370.00	7400.00	1970.00	4474	S.F.	CONCRETE FASCIA PANEL				450.00	500.00	860.00	5,590.00										1,970.00
55	578.00		578.00	5656	S.Y.	BRIDGE APPROACH SLAB																	578.00
SURFACING																							
56	12450.00	12450.00		5100	TON	CRUSHED SURFACING BASE COURSE	4,480.00	1,190.00	4,790.00					1,840.00	150.00								
LIQUID ASPHALT																							
57	7020.00	7020.00		5334	DOL	ANTI-STRIPPING ADDITIVE	2,900.00	930.00	1,800.00					1,390.00									
CEMENT CONCRETE PAVEMENT																							
58	5950.00	5950.00		5625	C.Y.	CEMENT CONC. PAVEMENT	4,000.00	770.00						1,180.00									
59	42840.00	42840.00		5637	DOL	RIDE SMOOTHNESS COMPLIANCE ADJUSTMENT	28,800.00	5,540.00						8,500.00									
60	-3.00	-3.00		5638	DOL	PORTLAND CEMENT CONC. COMPLIANCE ADJUSTMENT	-1.00	-1.00						-1.00									
61	2070.00	2070.00		5680	EACH	EPOXY-COATED TIE BAR WITH DRILL HOLE	1,210.00	290.00						570.00									
62	8620.00	8620.00		5685	EACH	CORROSION RESISTANT DOWEL BAR	6,120.00	1,270.00						1,230.00									
HOT MIX ASPHALT																							
63	7020.00	7020.00		5767	TON	HMA CL. 1/2 IN. PG 70-28	2,900.00	930.00	1,800.00					1,390.00									
64	13700.00	13700.00		5830	DOL	JOB MIX COMPLIANCE PRICE ADJUSTMENT	5,700.00	1,800.00	3,500.00					2,700.00									
65	9130.00	9130.00		5835	DOL	COMPACTION PRICE ADJUSTMENT	3,770.00	1,210.00	2,340.00					1,810.00									
66	11000.00	11000.00		5837	DOL	ASPHALT COST PRICE ADJUSTMENT	4,500.00	1,500.00	2,800.00					2,200.00									
67	-4.00	-4.00		6516	DOL	CYCLIC DENSITY PRICE ADJUSTMENT	-1.00	-1.00	-1.00					-1.00									
IRRIGATION AND WATER DISTRIBUTION																							
68	LUMP SUM		LUMP SUM	6071	L.S.	IRRIGATION SYSTEM	L.S.																
EROSION CNTL AND ROADSIDE RESTORATION																							
69	130.00	130.00		6403	DAY	ESC LEAD	130.00																
70	6.00	6.00		6471	EACH	INLET PROTECTION		6.00															
71	400.00	400.00		6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	400.00																
72	2.00	2.00		6469	EACH	TIRE WASH	2.00																
73	930.00	930.00		6373	L.F.	SILT FENCE	930.00																
74	2000.00	2000.00		6490	DOL	EROSION/WATER POLLUTION CONTROL	2,000.00																
75	1340.00	1340.00		6472	L.F.	TEMPORARY CURB	1,340.00																
76	180.00	180.00		7315	L.F.	TEMPORARY PIPE SLOPE DRAIN	180.00																

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	000	3200CT	*	STATE,FEDERAL,AVISTA UTB 1032
2	000	3200CY	*	STATE,FEDERAL,AVISTA UTB 1032
3	395	321101	**	STATE,FEDERAL,AVISTA UTB 1032
4	395	321101	**	STATE

04/20/12	MULTIPLE ITEMS ADDED TO SPEC 1-07.2(2)	LK	REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 3.1 SUMMARY OF QUANTITIES	SQ2
04/27/12	COLUMN 3 CHG TO GRP 2, COLUMN 8 .9 CHG TO GRP 1	LK	10	WA	NH-0395(098)			SHEET 4
05/02/12	QUAN CHNG BID ITEMS: 5, 27, 34, 35, 38, 39, 40, AND 42	LK						OF 215
DATE	REVISION	BY			000000			SHEETS

SUMMARY OF QUANTITIES

DOT_RGG900

10/3/2013

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION 1-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION 1-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 2	GROUP 3	GROUP 3	GROUP 4				
							FR LINE 4+23.00 TO 25+02.00	MKT LINE 20+00.00 TO 25+28.00	FRD LINE 10+00.00 TO 27+06.17	RETAINING WALL 1	RETAINING WALL 2	RETAINING WALL 3	RETAINING WALL 4	MKT LINE 25+28.00 TO 31+54.00	FSC LINE 19+65.60 TO 22+37.00	BNA LINE 80+00.00 TO 83+62.00	RETAINING WALL 5	FRANCIS UNDER XING	REIMBURS. FOR THIRD PARTY DAMAGE			
77	4.30	4.30		6445	ACRE	TACKIFIER	2.10		2.00					0.10		0.10						
78	4.30	4.30		6422	ACRE	SEEDING AND MULCHING	2.10		2.00					0.10		0.10						
79	640.00	640.00		6410	C.Y.	TOPSOIL TYPE B	190.00						425.00	25.00								
TRAFFIC																						
80	3755.00	3755.00		6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	2,435.00	670.00					650.00									
81	170.00	170.00		6701	L.F.	CEMENT CONC. TRAFFIC CURB	115.00	40.00					15.00									
82	115.00	115.00			L.F.	CONCRETE CURB WALL							115.00									
83	1370.00	1370.00			L.F.	CEMENT CONC. TRAFFIC ISLAND CURB TYPE 1	980.00	180.00					210.00									
84	1445.00	1445.00			L.F.	CEMENT CONC. TRAFFIC ISLAND CURB TYPE 2	460.00	180.00					520.00	285.00								
85	675.00	675.00			S.Y.	TRAFFIC ISLAND	195.00	50.00					280.00	150.00								
86	14.00	14.00			EACH	ISLAND CHANNELIZATION DEVICE	6.00	2.00					4.00	2.00								
87	250.00	250.00		6781	L.F.	TEMPORARY CONC. BARRIER			250.00													
88	2.00	2.00		7440	EACH	TEMPORARY IMPACT ATTENUATOR			2.00													
89	12260.00	12260.00		6807	L.F.	PLASTIC LINE	9,310.00	1,000.00					1,710.00	240.00								
90	2110.00	2110.00		6818	L.F.	PLASTIC WIDE LINE	1,170.00	230.00					420.00	290.00								
91	1320.00	1320.00			L.F.	PLASTIC CROSSWALK LINE	480.00	200.00					360.00	280.00								
92	180.00	180.00		6858	L.F.	PAINTED STOP LINE			180.00													
93	280.00	280.00		6859	L.F.	PLASTIC STOP LINE	140.00	50.00					60.00	30.00								
94	6.00	6.00		6860	EACH	PAINTED TRAFFIC ARROW			6.00													
95	4.00	4.00		6833	EACH	PLASTIC TRAFFIC ARROW	2.00							2.00								
96	3.00	3.00		6878	EACH	PAINTED RAILROAD CROSSING SYMBOL			3.00													
97	6.00	6.00		6867	EACH	PLASTIC BICYCLE LANE SYMBOL	5.00	1.00														
98	7250.00	7250.00		6888	L.F.	TEMPORARY PAVEMENT MARKING			7,250.00													
99	LUMP SUM	LUMP SUM		6890	L.S.	PERMANENT SIGNING	L.S.		L.S.													
100	LUMP SUM	LUMP SUM		6903	L.S.	TEMPORARY ILLUMINATION SYSTEM			L.S.													
101	LUMP SUM	LUMP SUM		6904	L.S.	ILLUMINATION SYSTEM	L.S.															
102	LUMP SUM	LUMP SUM			L.S.	SIGNAL/ELECTRICAL SYSTEM REMOVAL	L.S.															
103	LUMP SUM	LUMP SUM			L.S.	TEMPORARY TRAFFIC SIGNAL SYSTEM 1	L.S.															
104	LUMP SUM	LUMP SUM			L.S.	TEMPORARY TRAFFIC SIGNAL SYSTEM 2	L.S.															
105	LUMP SUM	LUMP SUM		6912	L.S.	TRAFFIC SIGNAL SYSTEM 1	L.S.															
106	LUMP SUM	LUMP SUM		6912	L.S.	TRAFFIC SIGNAL SYSTEM 2	L.S.															
107	LUMP SUM	LUMP SUM			L.S.	COMMUNICATION CONDUIT SYSTEM	L.S.															
108	525.00		525.00	6949	L.F.	CONDUIT PIPE 4 IN. DIAM.															525.00	
109	525.00		525.00		L.F.	CONDUIT PIPE 10 IN. DIAM.															525.00	
110	505.00		505.00		L.F.	CONDUIT SYSTEM															505.00	
111	2000.00	2000.00		6956	HR	SEQUENTIAL ARROW SIGN			2,000.00													
112	3000.00	3000.00		6993	HR	PORTABLE CHANGEABLE MESSAGE SIGN	3,000.00															
113	LUMP SUM	LUMP SUM		6973	L.S.	OTHER TEMPORARY TRAFFIC CONTROL			L.S.													
114	500.00	500.00		6980	HR	FLAGGERS AND SPOTTERS	500.00															
115	200.00	200.00		6992	HR	OTHER TRAFFIC CONTROL LABOR	200.00															
116	LUMP SUM	LUMP SUM		6974	L.S.	TRAFFIC CONTROL SUPERVISOR	L.S.															
117	220.00	220.00		6982	S.F.	CONSTRUCTION SIGNS CLASS A	170.00	25.00					25.00									
OTHER ITEMS																						
118	LUMP SUM	LUMP SUM		7003	L.S.	TYPE B PROGRESS SCHEDULE	L.S.															
119	4040.00	4040.00		7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	1,820.00	710.00					1,360.00	150.00								
120	26080.00	26080.00		7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	11,730.00	4,400.00					9,230.00	720.00								
121	46.00	38.00	8.00	7014	C.Y.	GRAVEL BACKFILL FOR DRAIN	8.00			2.00	2.00	3.00	23.00					8.00				

GROUP LEGEND :

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	000	3200CT	*	STATE,FEDERAL,AVISTA UTB 1032
2	000	3200CY	*	STATE,FEDERAL,AVISTA UTB 1032
3	395	321101	**	STATE,FEDERAL,AVISTA UTB 1032
4	395	321101	**	STATE

04/20/12	MULTIPLE ITEMS ADDED TO SPEC 1-07.2(2)	LK	REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 3.2	SQ3 SHEET 5 OF 215 SHEETS
04/27/12	COLUMN 3 CHG TO GRP 2, COLUMN 8 .9 CHG TO GRP 1	LK	10	WA	NH-0395(098)			
05/02/12	QUAN CHNG BID ITEMS: 5, 27, 34, 35, 38, 39, 40, AND 42	LK						
DATE	REVISION	BY						

SUMMARY OF QUANTITIES

DOT_RGG900

10/3/2013

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION 1-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION 1-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 2	GROUP 3	GROUP 3	GROUP 4			
							FR LINE 4+23.00 TO 25+02.00	MKT LINE 20+00.00 TO 25+28.00	FRD LINE 10+00.00 TO 27+06.17	RETAINING WALL 1	RETAINING WALL 2	RETAINING WALL 3	RETAINING WALL 4	MKT LINE 25+28.00 TO 31+54.00	FSC LINE 19+65.60 TO 22+37.00	BNA LINE 80+00.00 TO 83+62.00	RETAINING WALL 5	FRANCIS UNDER XING	REIMBURS. FOR THIRD PARTY DAMAGE		
122	1750.00	1750.00		7055	S.Y.	CEMENT CONC. SIDEWALK	1,030.00	365.00						355.00							
123	525.00	525.00		7059	S.Y.	CEMENT CONC. DRIVEWAY ENTRANCE TYPE COS	235.00	145.00						145.00							
124	1.00	1.00		7058	EACH	CEMENT CONC. CURB RAMP TYPE 1		1.00													
125	15.00	15.00		7058	EACH	CEMENT CONC. CURB RAMP TYPE 2	9.00	3.00	2.00					1.00							
126	2.00	2.00		7058	EACH	CEMENT CONC. CURB RAMP TYPE 3	2.00														
127	4.00	4.00		7054	S.F.	DETECTABLE WARNING SURFACE			4.00												
128	545.00	545.00		7085	L.F.	COATED CHAIN LINK FENCE TYPE 3	545.00														
129	23.00	23.00		7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	23.00														
130	2.00	2.00		7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	2.00														
131	325.00	325.00		7166	TON	ROCK FOR ROCK WALL							220.00	105.00							
132	240.00	240.00		7167	TON	BACKFILL FOR ROCK WALL							160.00	80.00							
133	1.00	1.00		9602	EACH	ADJUST INLET							1.00								
134	2.00	2.00		9605	EACH	CONNECTION TO DRAINAGE STRUCTURE		2.00													
135	3.00	3.00		3080	EACH	ADJUST MANHOLE		2.00					1.00								
136	9.00	9.00		7360	EACH	MANHOLE 48 IN. DIAM. TYPE 1	5.00	2.00					2.00								
137	1.00	1.00			EACH	ADJUST DRYWELL	1.00														
138	LUMP SUM	LUMP SUM		7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE		L.S.													
139	1600.00		1600.00	7400	HR	TRAINING														1,600.00	
140	10000.00	10000.00		7480	DOL	ROADSIDE CLEANUP	10,000.00														
141	5.00		5.00	7725	DOL	REIMBURSEMENT FOR THIRD PARTY DAMAGE														5.00	
142	-2.00	-1.00	-1.00	7728	DOL	MINOR CHANGE	-1.00													-1.00	
143	67960.00	26310.00	41650.00	7730	DOL	FUEL COST ADJUSTMENT	26,160.00								150.00	41,650.00					
144	5000.00		5000.00	7731	DOL	STEEL COST ADJUSTMENT														5,000.00	
145	-2.00	-2.00		7732	DOL	AGGREGATE COMPLIANCE PRICE ADJUSTMENT	-1.00								-1.00						
146	LUMP SUM	LUMP SUM		7736	L.S.	SPCC PLAN		L.S.													
147	LUMP SUM		LUMP SUM	7500	L.S.	FIELD OFFICE BUILDING														L.S.	
148	9910.00	8130.00	1780.00	7559	S.F.	GEOSYNTHETIC RETAINING WALL				480.00	530.00	900.00	6,220.00						1,780.00		
149	5720.00	4660.00	1060.00	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL				270.00	310.00	90.00	3,990.00						1,060.00		

GROUP LEGEND :

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	000	3200CT	*	STATE,FEDERAL,AVISTA UTB 1032
2	000	3200CY	*	STATE,FEDERAL,AVISTA UTB 1032
3	395	321101	**	STATE,FEDERAL,AVISTA UTB 1032
4	395	321101	**	STATE

04/20/12	MULTIPLE ITEMS ADDED TO SPEC 1-07.2(2)	LK	REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 3.3 SUMMARY OF QUANTITIES	SQ4
04/27/12	COLUMN 3 CHG TO GRP 2, COLUMN 8 .9 CHG TO GRP 1	LK	10	WA	NH-0395(098)			SHEET 6 OF 215 SHEETS
05/02/12	QUAN CHNG BID ITEMS: 5, 27, 34, 35, 38, 39, 40, AND 42	LK						
DATE	REVISION	BY			000000			

SITE RECLAMATION PLAN

The reclamation requirements must match the approved ultimate reclamation plan on file in the Headquarter Right of Way office.

Existing and proposed contours need to be shown only for the area of the pit site worked in the project.

Make sure that the Materials Lab agrees that the type of materials specified can be taken from the specified site.

Specify the items of work to be performed within the site (clearing and grubbing, stripping, seeding, fertilizing and mulching).

RECLAMATION PLANS BEST PRACTICES

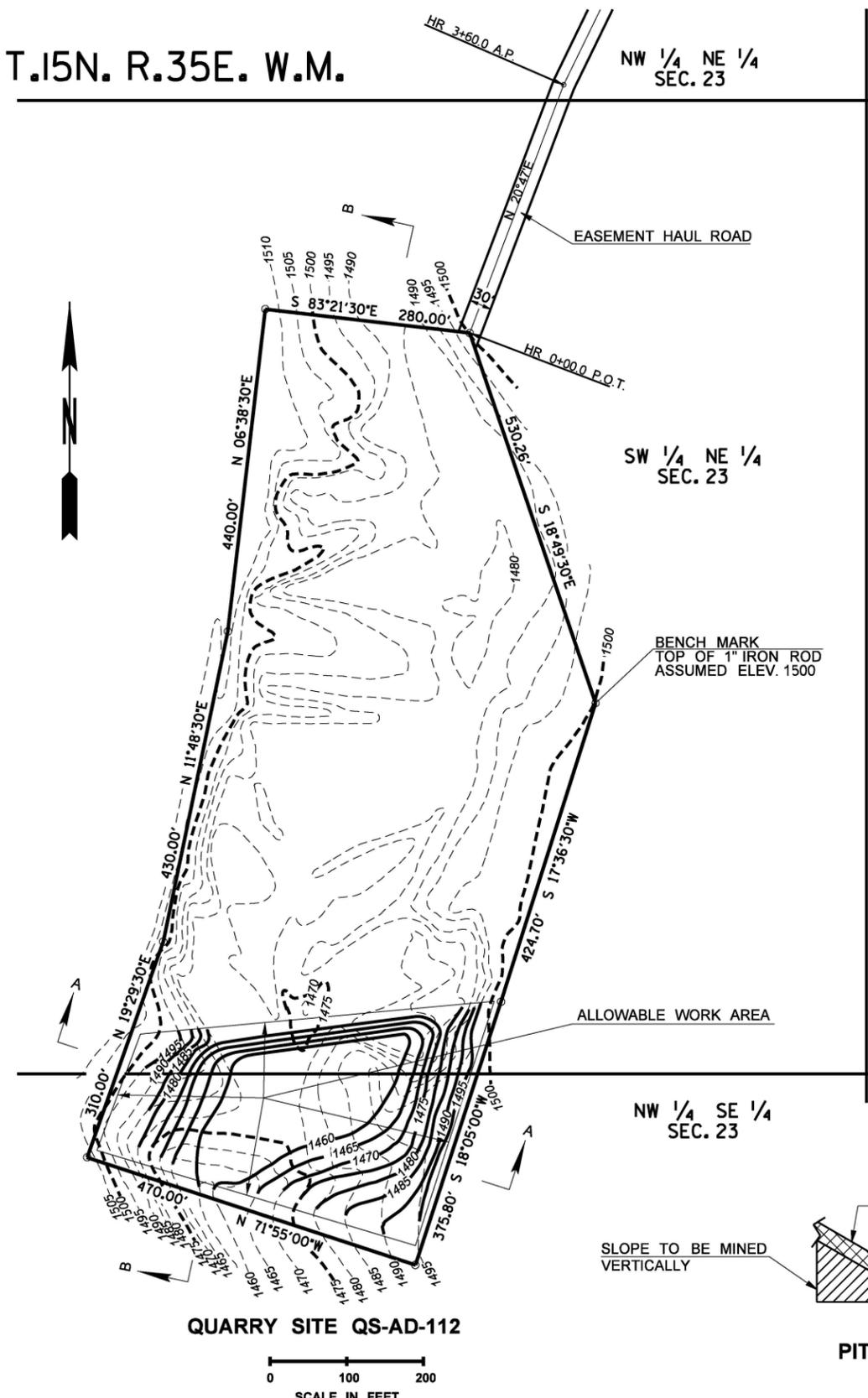
1. Clearly label contours. Label the lines in several locations so that elevation can be easily determined without having to trace the line around the sheet.
2. Tie proposed contours to existing contours with the same elevations.
3. Match cross sections to what is shown on the plan view. For example, if the cross section view shows a 2:1 slope, the contours on the plan view need to represent this same 2:1 slope.
4. Bench marks must be shown on the plan. The contours relate to the bench marks, which need to be clearly described as known or assumed. Label the elevation.
5. Match the boundary bearings and distances to the sundry site plan.
6. Construction notes must be consistent with the work to be performed. For example, do not copy construction notes from the ultimate reclamation plan to the contract reclamation plan if they don't apply to the contractor's work on the project.
7. Show contours for ultimate and contract purposes at 5 and 10 foot intervals.

T.15N. R.35E. W.M.

NW 1/4 NE 1/4 SEC. 23

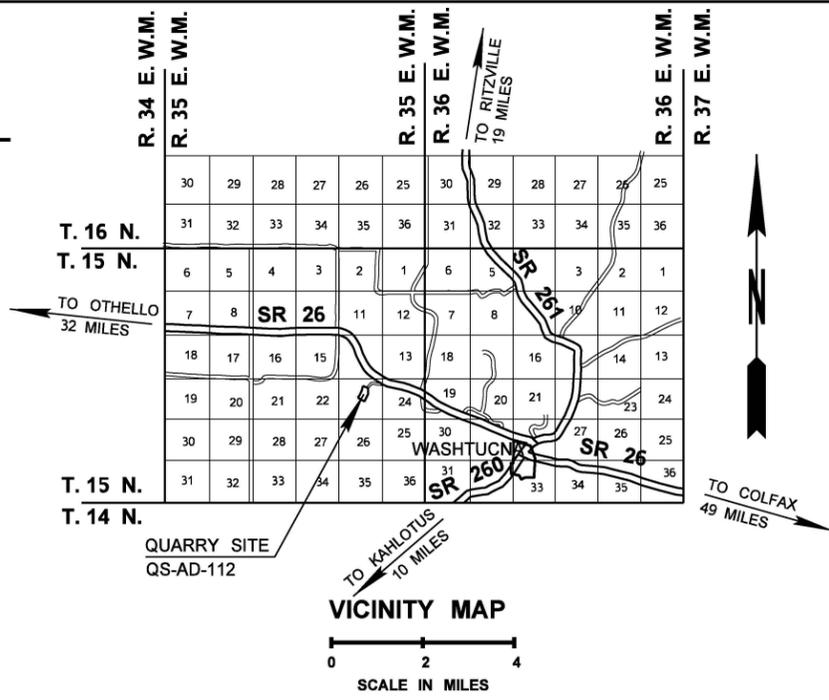
SW 1/4 NE 1/4 SEC. 23

NW 1/4 SE 1/4 SEC. 23



QUARRY SITE QS-AD-112

SCALE IN FEET



VICINITY MAP
SCALE IN MILES

QUARRY SITE QS-AD-112
There is sufficient material in this quarry for this project

SOURCE OF MATERIAL FOR PRODUCTION OF:

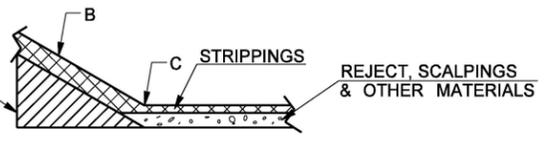
- BALLAST
- CRUSHED SURFACING TOP COURSE
- CRUSHED SCREENING 1/2 INCH TO 3/4 INCH
- CRUSHED SCREENING 3/4 INCH TO 0
- PRIME COAT AGGREGATE
- MINERAL AGGREGATE FOR ASPHALT CONCRETE
- PAVEMENT CLASS B

STRIPPING INCLUDING HAUL SITE QS-AD-112

LEGEND

A	Natural Area 10' Minimum
B	2:1 Slope Maximum
C	Rounding For Natural Appearance
D	Vertical Slope 30' Maximum
E	Bench 30' Minimum
- - -	Existing Contours
- - -	Ultimate Contours
▨	Area For Additional Borrow Material
○	Contract Work Area

Contour Interval 5'



PIT FLOOR DETAIL

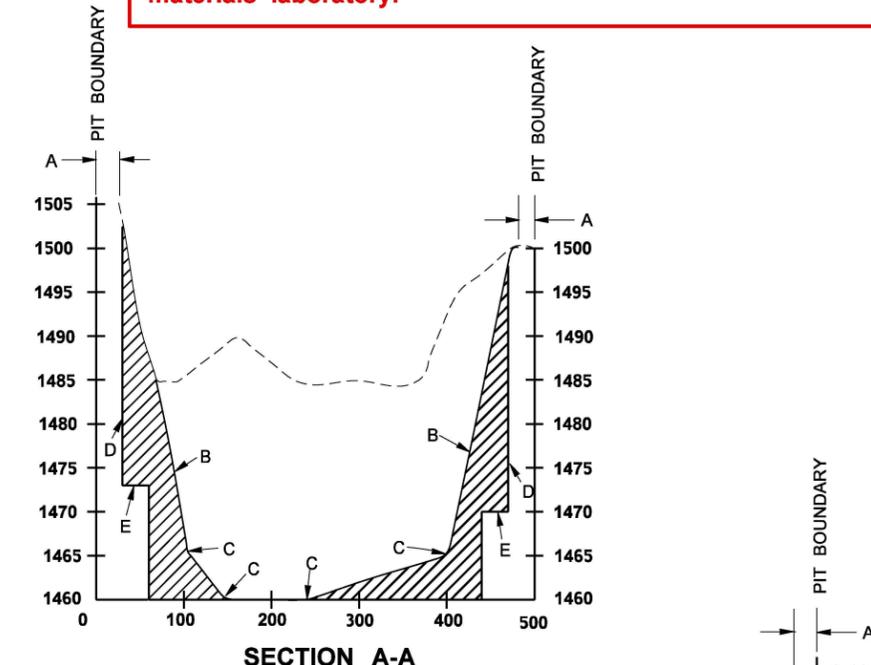
NOTES:

1. Quarry QS-AD-112 is owned by the Washington State Department of Transportation.
2. All slope intersections shall be rounded for natural appearance.
3. No contaminates are anticipated.
4. When all mining is completed in this quarry site, all disturbed areas shall be seeded, fertilized, and mulched with special erosion control mix.
5. Drainage shall be towards the south end of the site.
6. Scalpings shall be used on the quarry floor and on the sides to obtain the side slope. It may be necessary to haul additional borrow material into site to construct the side slopes for ultimate reclamation.
7. All pit boundaries shall be fenced with Type 2 wire fencing including a 20 foot wide gate at the haul road as first order of work.

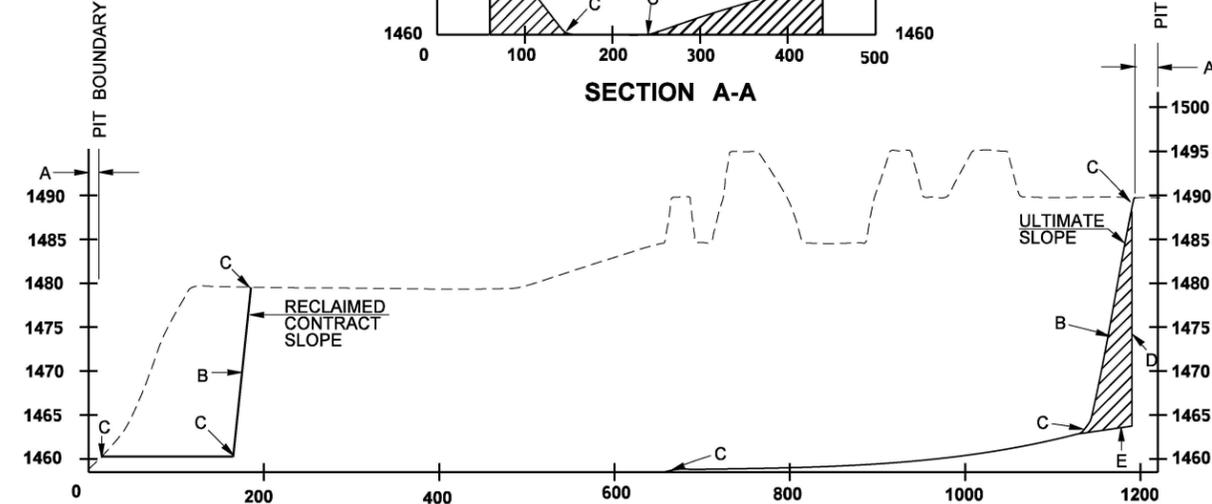
Notes to the Reviewer:

1) Make sure that all notes are project specific.

2) The contract reclamation plan is developed from the ultimate reclamation plan on file with the regional materials laboratory.



SECTION A-A



SECTION B-B

FILE NAME	F:\CPEP_ReviewCourse\IDG\Nci\Clint\CPEP_F004.0_PS_RC.dgn	REGION NO.	10	STATE	WASH	FED.AID PROJ.NO.	NH-0000(000)	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 4 RECLAMATION PLAN	PLAN REF NO	RC1
TIME	11:27:39 AM	JOB NUMBER	00Z000	CONTRACT NO.		LOCATION NO.	XL-1234			SHEET	OF
DATE	9/18/2013	DESIGNED BY	DESIGNER	ENTERED BY	CAD OPERATOR	CHECKED BY	TEAM LEADER	PROJ. ENGR.	PROJECT ENGINEER	REGIONAL ADM.	REGIONAL ADM.
PLOTTED BY	HIICI	REVISION		DATE	BY						

ROADWAY SECTIONS

ROADWAY SECTIONS CRITERIA

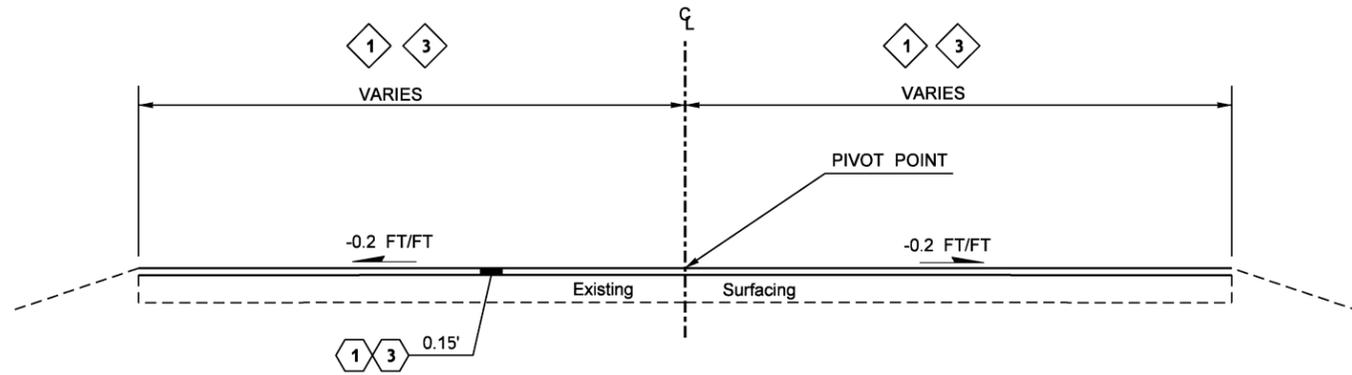
1. Must cover the entire project
 - a. Mainline roadway with no gaps or overlaps in stationing
 - b. Incidental lines with no gaps or overlaps in stationing
 - c. Bridge approach slabs
 - d. Broken back detail for high side of super
2. Must be buildable
3. Must agree with the Design Report information
4. Must agree with the paving report
5. Must agree with the information shown on the paving plans

If you have a good set of paving plans, the roadway sections can be a little more generic. Tapers and changes in lane and shoulder widths shall be shown on the paving plan, so dimensions on the roadway section can be shown as variable from the minimum to the maximum. If there is no paving plan, the tapers, and lane and shoulder width changes must be clearly represented on the roadway sections or spelled out in the notes.

The roadway sections legend should be shown on each roadway section sheet.

Notes for the roadway sections should appear only on the sheets where the note applies. Do not include all notes on all sheets. Number notes consecutively for the project; do not start renumbering on each sheet.

Identify equations and exception areas on the roadway sections. This will account for areas that would otherwise appear as gaps in the stationing.

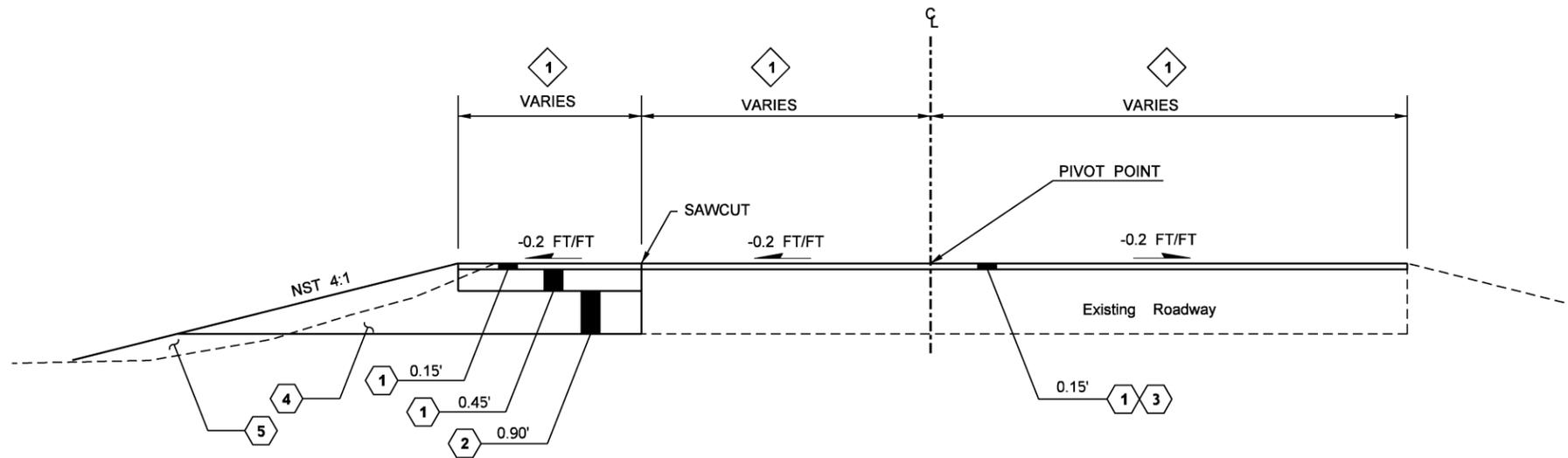


ROADWAY SECTION A

STA. L 461+50.00 TO STA. L 465+36.00
 STA. L 468+18.00 TO STA. L 471+61.00

CONSTRUCTION NOTES

- 1 SEE PAVING PLANS
- 2 SEE SITE PREPARATION PLANS
- 3 BRIDGE NO. 241/010 AND APPROACH SLABS NOT INCLUDED IN PROJECT STA. L465+36.00 TO STA. L468+18.00
- 4 ALL PAVEMENT AND SURFACING DEPTHS SHOWN ARE COMPACTED DEPTHS (SEE STD. SPEC. 5-04.3(9) FOR MAXIMUM DEPTHS PER LAYER)
- 5 NST - NOT STEEPER THAN



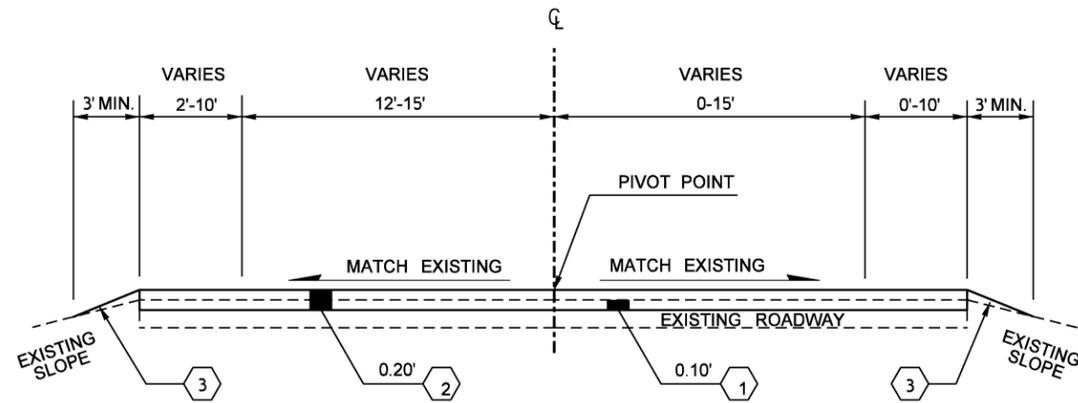
ROADWAY SECTION B

STA. L 471+61.00 TO STA. L 473+00.00

LEGEND

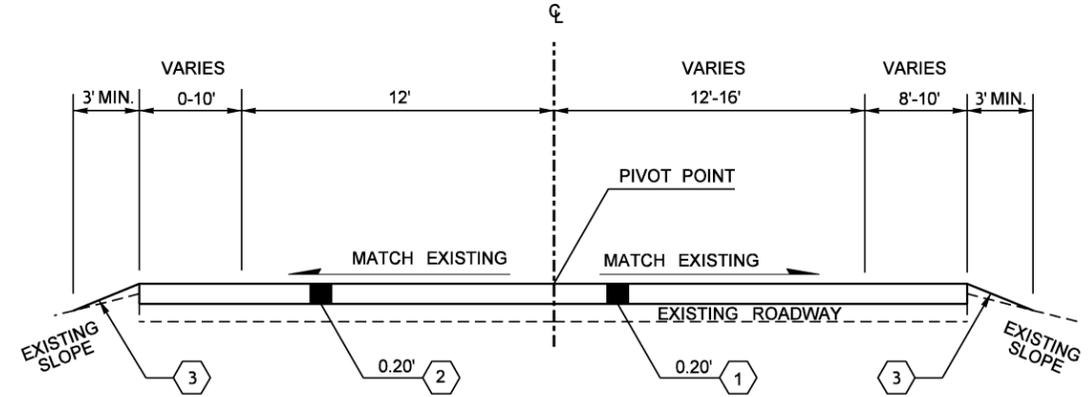
- 1 ASPHALT CONCRETE PAVEMENT CLASS A PG. 64-28
- 2 CRUSHED SURFACING BASE COURSE
- 3 PLANING BITUMINOUS PAVEMENT
- 4 ROADWAY EXCAVATION INCL. HAUL
- 5 EMBANKMENT COMPACTION

FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F005.0_PS_RS.dgn		REGION NO. 10		STATE WASH	FED.AID PROJ.NO. NH-0000(000)	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE	Plot 13
TIME 10:20:34 AM	DATE 10/10/2013	JOB NUMBER 00Z000		LOCATION NO. XL-1234	RS1			
PLOTTED BY HIIICI	DESIGNED BY DESIGNER	REVISION	DATE	BY	DATE	DATE	FIGURE 5	SHEET OF SHEETS
ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEADER						ROADWAY SECTION	
PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.							



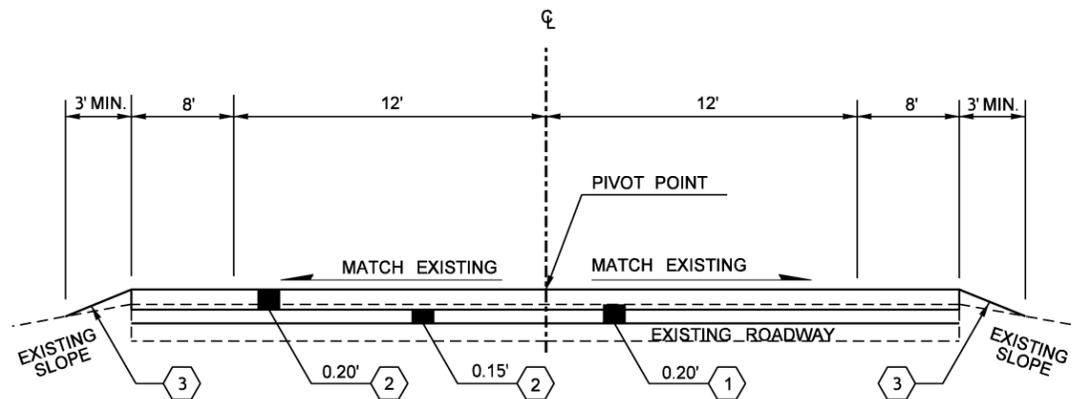
ROADWAY SECTION A

STATION	TO	STATION
L 10+00.00		L 31+11.37
L 34+74.70		L 46+96.00
C 318+92.80		C 327+22.80



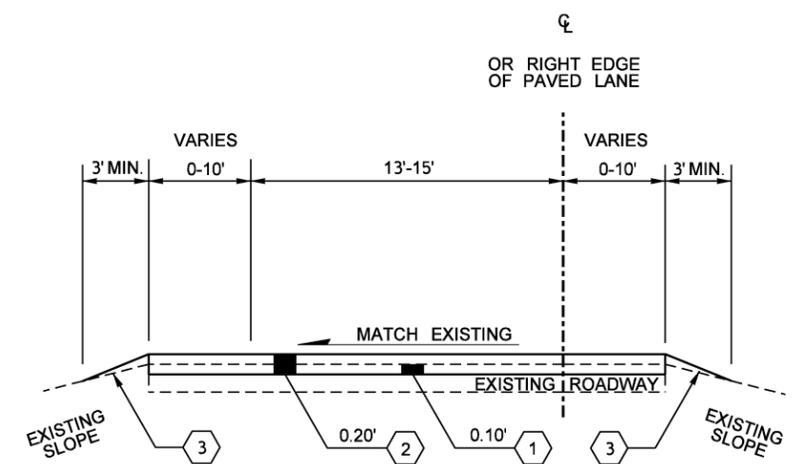
ROADWAY SECTION B

STATION	TO	STATION
L 46+96.00		L 64+38.40
L 77+58.40		L 239+15.20
L 241+79.20		L 242+84.80
CEW 13+00.00		CEW 30+06.93



ROADWAY SECTION C

STATION	TO	STATION
L 64+38.40		L 77+58.40
L 239+15.20		L 241+79.20



ROADWAY SECTION D

STATION	TO	STATION
C 327+22.80		C 333+01.65
C 327+22.80		L 39+27.95

LEGEND

- ① PLANING BITUMINOUS PAVEMENT
- ② HMA CL. 1/2 IN. PG
- ③ SHOULDER FINISHING

NOTES:

1. ALL DEPTHS SHOWN ARE COMPACTED DEPTHS
2. SEE PAVING PLAN FOR VARIABLE WIDTHS
3. BRIDGE 12/612 IS INCLUDED IN THIS PROJECT (STATION L 31+11.37 TO L34+74.70)

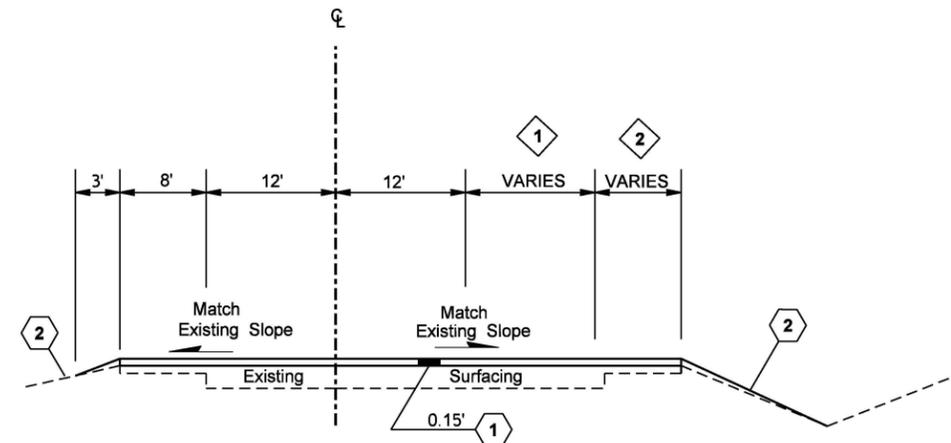
NOT TO SCALE

FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F005.1_PS_RS.dgn		REGION NO. 10		STATE WASH		FED.AID PROJ.NO. NH-0000(000)		Washington State Department of Transportation		CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE		Plot 14	
TIME 10:21:30 AM		JOB NUMBER 00Z000		CONTRACT NO.		LOCATION NO. XL-1234		DATE		FIGURE 5.1		PLAN REF NO RS2	
DATE 10/10/2013		CONTRACT NO.		LOCATION NO.		XL-1234		P.E. STAMP BOX		ROADWAY SECTION		SHEET OF SHEETS	
PLOTTED BY HIIICI		REVISION		DATE		BY		P.E. STAMP BOX					
DESIGNED BY DESIGNER													
ENTERED BY CAD OPERATOR													
CHECKED BY TEAM LEADER													
PROJ. ENGR. PROJECT ENGINEER													
REGIONAL ADM. REGIONAL ADM.													

CONSTRUCTION NOTES:

- 1 AUXILIARY PASSING LANE
LANE VARIES FROM 0' AT L 669+29
TO 12' AT L 672+24, AND
FROM 12' AT L 702+10 TO 0' AT
L 708+01
- 2 RIGHT SHOULDER
SHOULDER VARIES FROM 8' AT L 699+29
TO 4' AT L 670+28, AND FROM 4'
AT L 706+04 TO 8' AT
L 708+01

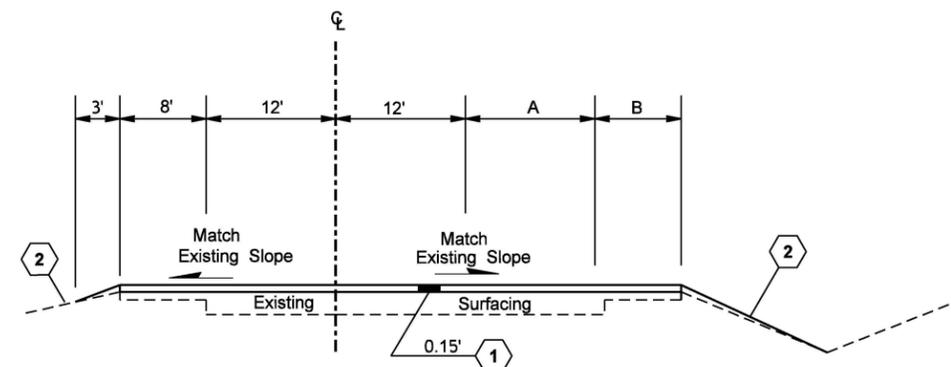
L-LINE



ROADWAY SECTION C

L 505+25 TO L 997+38

L-LINE

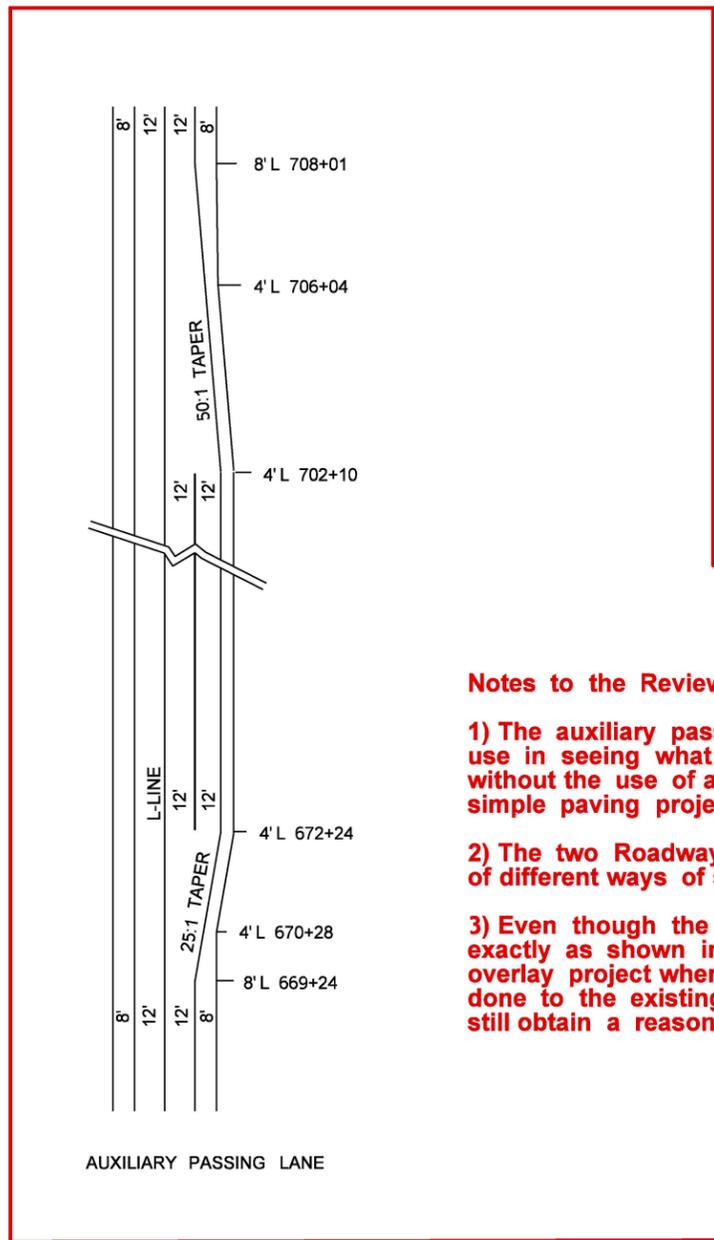


ROADWAY SECTION C

STATION	A	B
L 505+25 TO L 669+29	0	8'
L 669+29 TO L 672+24	0-12'	8'-4'
L 672+24 TO L 702+10	12'	4'
L 702+10 TO L 708+01	12'-0	4'-8'
L 708+01 TO L 997+38	0	8'

LEGEND

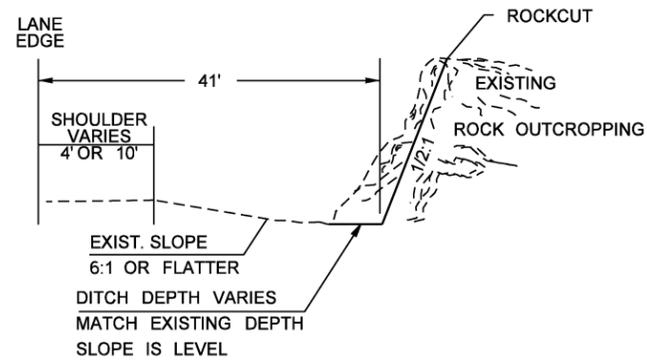
- 1 ASPHALT CONC. PAVEMENT CL. B - 0.15' COMP. DEPTH
- 2 CRUSHED SURFACING TOP COURSE - VARIES COMP. DEPTH



Notes to the Reviewer:

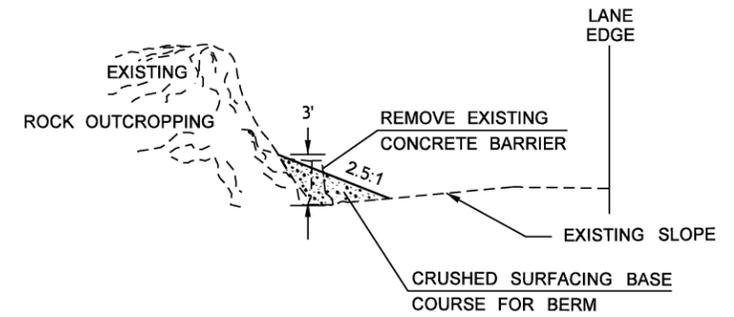
- 1) The auxiliary passing lane detail is shown here for your use in seeing what Roadway Section C is accomplishing without the use of a paving or channelization plan on a simple paving project.
- 2) The two Roadway Section C's are displayed as an example of different ways of showing the same thing.
- 3) Even though the shoulder doesn't specify tapering exactly as shown in the plan detail it is sufficient for an overlay project where the paving in the field will be done to the existing condition and the contractor can still obtain a reasonable quantity take-off from it.

FILE NAME	F:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F005.2_PS_RS.dgn			REGION NO.	STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 5.2 ROADWAY SECTION	Plot 15
TIME	11:27:42 AM			10	WASH	NH-0000(000)			PLAN REF NO RS3
DATE	9/18/2013			JOB NUMBER	00Z000	LOCATION NO. XL-1234			SHEET OF SHEETS
PLOTTED BY	HIIICI			CONTRACT NO.					
DESIGNED BY	DESIGNER								
ENTERED BY	CAD OPERATOR								
CHECKED BY	TEAM LEADER								
PROJ. ENGR.	PROJECT ENGINEER								
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY					



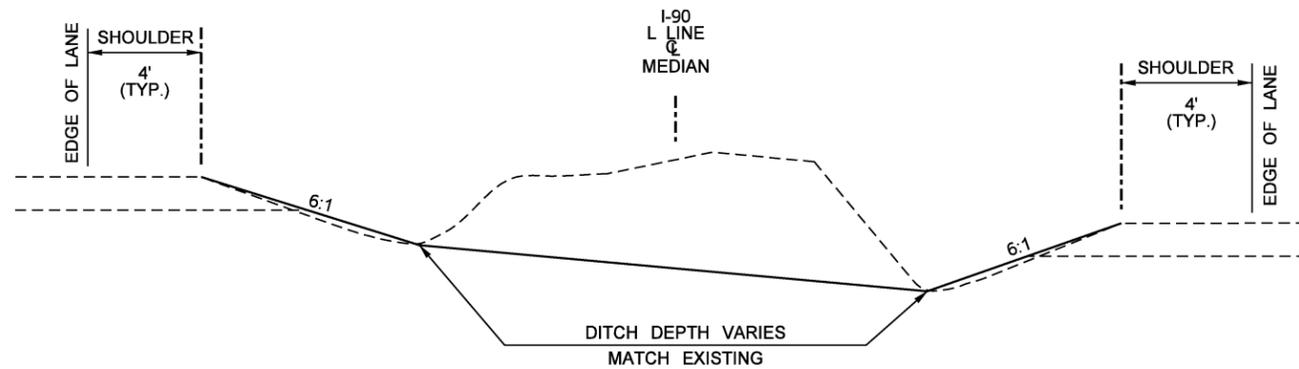
**ROCKCUT DETAIL
(TYPICAL)**

- | | |
|----------------------------|----------------------------|
| LL 1118+92 to 1126+00 MED. | LR 1112+50 to 1115+00 MED. |
| LL 1177+50 to 1192+50 MED. | LR 1128+10 to 1146+70 MED. |
| LL 1119+75 to 1140+50 LT. | LR 1152+70 to 1155+50 MED. |
| LL 1176+50 to 1193+00 LT. | LR 1134+50 to 1138+50 RT. |
| LL 1203.50 to 1205+00 LT. | LR 1178+00 to 1179+25 RT. |
| | LR 1182+00 to 1194+40 RT. |



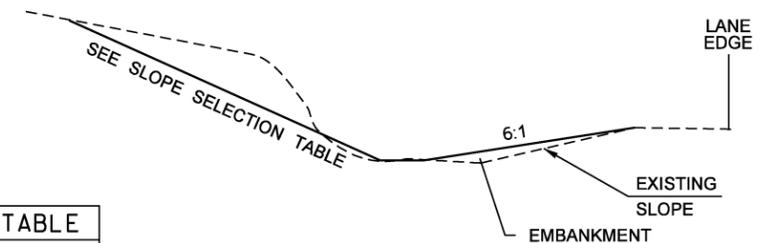
**MEDIAN BERM DETAIL
(TYPICAL)**

- | | |
|----------------------------|----------------------------|
| LL 1225+45 to 1228+50 MED. | LR 1092+50 to 1105+50 MED. |
| LL 1240+00 to 1250+20 MED. | LR 1220+00 to 1254+00 MED. |
| LL 1220+00 to 1222+50 LT. | LR 1275+50 to 1281+00 MED. |
| LL 1376+00 to 1382+50 LT. | |



**MEDIAN CUT DETAIL
(TYPICAL)**

- | |
|-----------------------|
| LR 1274+50 to 1276+00 |
| LR 1332+50 to 1341+00 |



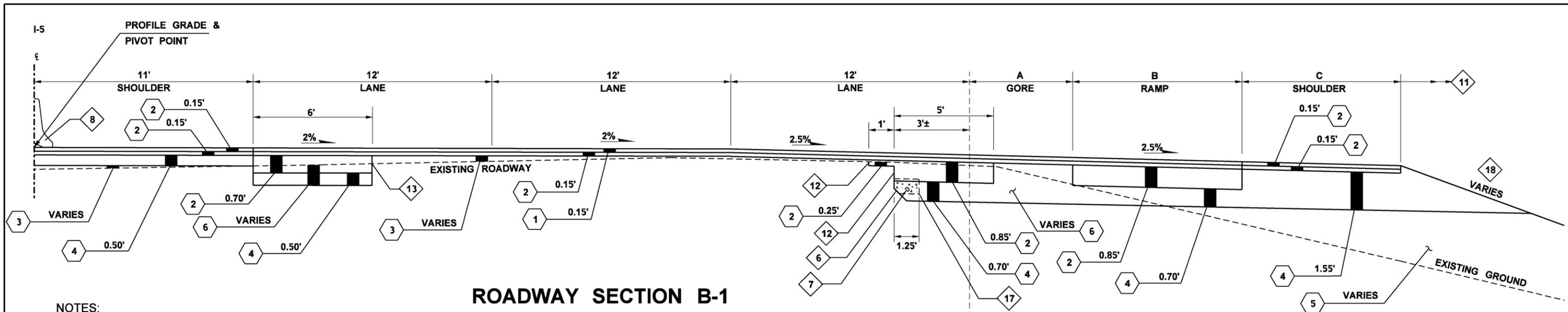
SLOPE SELECTION TABLE	
HEIGHT OF CUT	SLOPE NOT STEEPER THAN
0-5	6:1
5-20	3:1
OVER 20	2:1

**SLOPE FLATTENING DETAIL
(TYPICAL)**

- | | |
|----------------------------|----------------------------|
| LR 1199+50 to 1203+75 MED. | LL 1094+50 to 1097+00 MED. |
| LR 1588+10 to 1598+00 MED. | LL 1177+50 to 1192+50 MED. |
| LR 1691+50 to 1710+00 MED. | LL 1344+25 to 1353+50 MED. |
| LR 1134+00 to 1138+00 RT. | LL 1135+50 to 1140+50 LT. |
| LR 1333+50 to 1338+00 RT. | LL 1214+50 to 1220+00 LT. |
| LR 1372+50 to 1376+00 RT. | LL 1241+00 to 1254+50 LT. |

NOT TO SCALE

FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F005.3_PS_RS.dgn		REGION NO. 10		STATE WASH	FED.AID PROJ.NO. NH-0000(000)	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 5.3	Plot 16
TIME 11:07:04 AM	DATE 10/10/2013	JOB NUMBER 00Z000		LOCATION NO. XL-1234	PLAN REF NO RS4			
PLOTTED BY HIIICI	DESIGNED BY DESIGNER	REVISION	DATE	BY				SHEET OF SHEETS
ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEADER							
PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.							
P.E. STAMP BOX		P.E. STAMP BOX		DATE		ROADWAY SECTION		



ROADWAY SECTION B-1

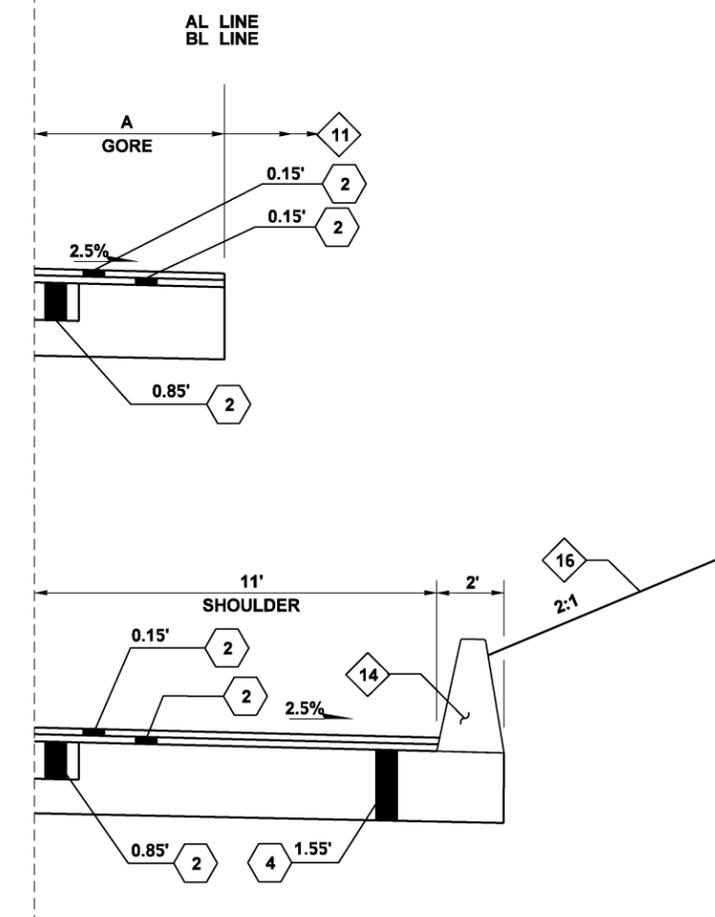
STATION RANGE	A	B	C
L 1450+25.14 (RT) TO L 1464+01.08 (RT)	0'	0'	10'
L 1461+01.08 (RT) TO L 1464+40.90 (RT)	0'	0' - 2'	10' - 8'
L 1464+40.90 (RT) TO L 1467+01.44 (RT)	0'	2' - 15'	8'
L 1467+01.44 (RT) TO L 1470+20.00 (RT)	0' - 16'	15'	8'
L 1504+76.00 (RT) TO L 1510+75.44 (RT)	12' - 0'	15'	8'
L 1510+75.44 (RT) TO L 1517+26.18 (RT)	0'	15' - 2'	8'
L 1517+26.18 (RT) TO L 1518+26.09 (RT)	0'	2' - 0'	8' - 10'
L 1518+26.09 (RT) TO L 1520+00.00 (RT)	0'	0'	10'

ROADWAY SECTION B-2

STATION RANGE	A
L 1470+20.00 (RT) TO L 1473+01.49 (RT)	16' - 11'
L 1495+17.30 (RT) TO L 1504+76.00 (RT)	11' - 12'

ROADWAY SECTION B-3

STATION RANGE
L 1473+01.49 (RT) TO L 1481+70.54 (RT)
L 1489+28.13 (RT) TO L 1495+17.30 (RT)



NOTES:

- 6 DO NOT MAKE VERTICAL CUT BELOW PCCP PANEL USE 1:1
- 7 4" CORRUGATED PLASTIC UNDERDRAIN PIPE TO BE REMOVED AS PART OF ROADWAY EXCAVATION INCL. HAUL.
- 8 SEE STAGING AND TESC PLANS FOR BARRIER TYPE AND PLACEMENT
- 11 SEE SHOULDER DETAILS, REFERENCE SHEET R16
- 12 SAW CUT OR GRIND EDGE TO BE WITHIN 1" OF EDGE OF EXISTING CONC. PANEL EDGE
- 13 SAW CUT OR GRIND EDGE
- 14 SINGLE SLOPE BARRIER PRE-CAST TYPE SEE STANDARD PLAN C-13
- 16 CONCRETE SLOPE PROCTION SEE STANDARD PLAN A-30.10
- 18 SEE SHOULDER SCHEDULE, REFERENCE SHEET RS15, RS16 FOR SHOULDER SLOPE

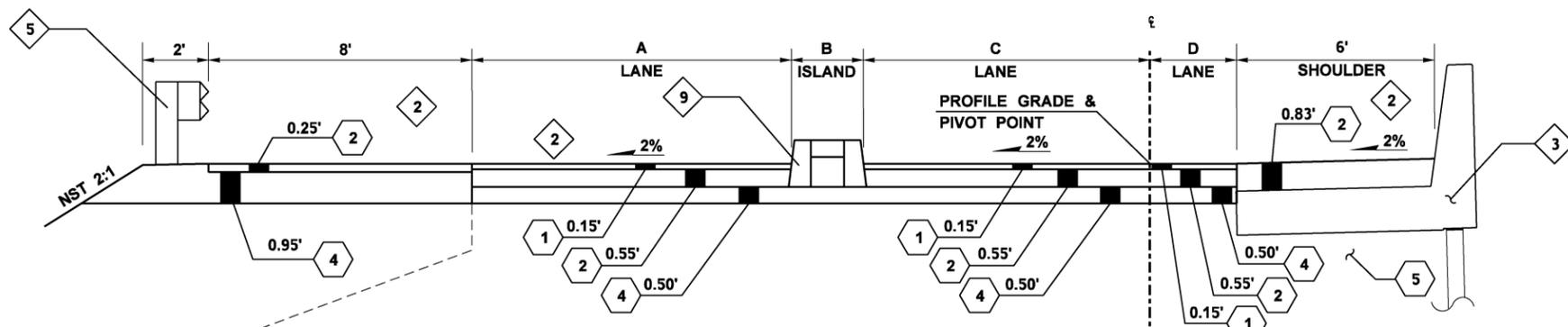
ALL DEPTHS ARE COMPACTED DEPTHS
NST = NOT STEEPER THAN

LEGEND

- 1 HMA CL. 1/2 IN. PG 70-22
- 2 HMA CL. 1/2 IN. PG 64-22
- 3 HMA FOR PRELEVELING CL. 1/2 IN. PG 64-22
- 4 CRUSHED SURFACING BASE COURSE
- 5 SPECIAL BORROW INCL. HAUL
- 6 ROADWAY EXCAVATION INCL. HAUL
- 7 PLANING BITUMINOUS PAVEMENT
- 8 TOPSOIL TYPE B

NOT TO SCALE

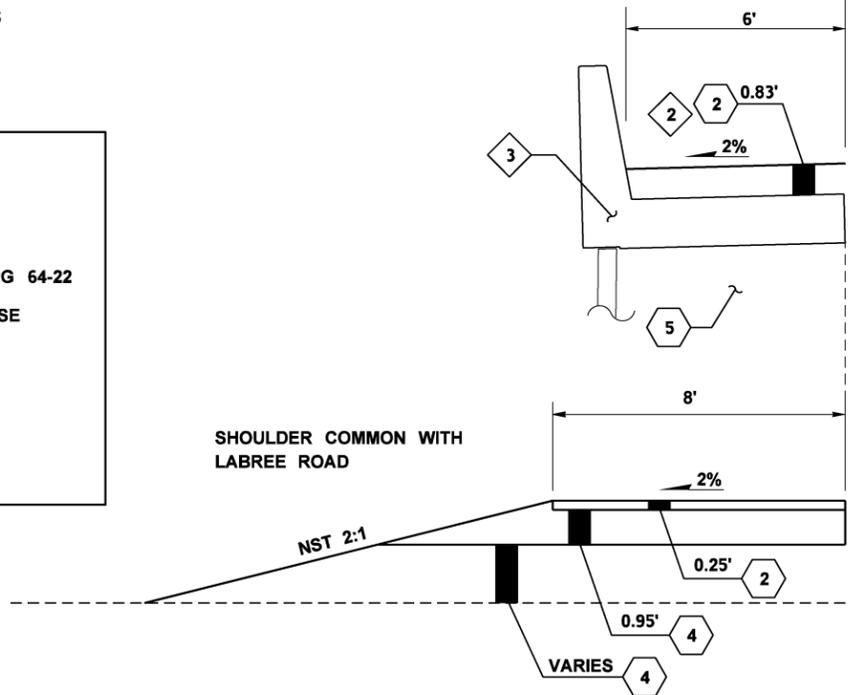
FILE NAME	J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F005.4_PS_RS.dgn	REGION NO.	STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 5.4 ROADWAY SECTION	Plot 3
TIME	10:23:32 AM	10	WASH	NH-0000(000)			PLAN REF NO RS5
DATE	10/10/2013	JOB NUMBER	00Z000	LOCATION NO. SP1234			SHEET OF SHEETS
DESIGNED BY	DESIGNER	CONTRACT NO.					
ENTERED BY	CAD OPERATOR						
CHECKED BY	TEAM LEAD						
PROJ. ENGR.	PROJECT ENGINEER						
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY	P.E. STAMP BOX	DATE	P.E. STAMP BOX



NOTES:

- 2 CROSS SLOPES VARY, SEE SUPERELEVATION DIAGRAMS
 - 3 GEOSYNTHETIC WALL SINGLE SLOPE BARRIER SEE STANDARD PLAN D-3b
 - 5 BEAM GUARDRAIL TYPE 1 SEE STANDARD PLAN C-1
 - 9 CEMENT CONCRETE TRAFFIC CURB SEE STANDARD PLAN F-10.12
 - 18 SEE SHOULDER SCHEDULE, REFERENCE SHEET RS15, RS16 FOR SHOULDER SLOPE
- ALL DEPTHS ARE COMPACTED DEPTHS
NST = NOT STEEPER THAN

LEGEND	
1	HMA CL. 1/2 IN. PG 70-22
2	HMA CL. 1/2 IN. PG 64-22
3	HMA FOR PRELEVELING CL. 1/2 IN. PG 64-22
4	CRUSHED SURFACING BASE COURSE
5	SPECIAL BORROW INCL. HAUL
6	ROADWAY EXCAVATION INCL. HAUL
7	PLANING BITUMINOUS PAVEMENT
8	TOPSOIL TYPE B



ROADWAY SECTION E-1

STATION RANGE	A	B	C	D
BL 1484+79.62 (LT) TO BL 1484+84.62 (LT)	0' - 79.5'	29.5' - 28.4'	30'	
BL 1484+84.62 (LT) TO BL 1485+78.69 (LT)	79.5' - 35.8'	28.4' - 0'	30'	
BL 1485+78.69 (LT) TO BL 1486+92.70 (LT)	35.8' - 12'	0'	30' - 26'	
BL 1486+92.70 (LT) TO BL 1488+18.84 (LT)	12'	0'	26'	
BL 1484+75.62 (RT) TO BL 1485+05.01 (RT)				20'-0'
BL 1485+05.01 (RT) TO BL 1485+26.84 (RT)				0'
BL 1488+18.84 (RT) TO BL 1489+52.62 (RT)				0'
BL 1491+39.29 (LT) TO BL 1491+78.04 (LT)	0'	0'	17.8' - 15'	
BL 1491+78.04 (LT) TO BL 1496+50.31 (LT)	0'	0'	15'	

ROADWAY SECTION E-2

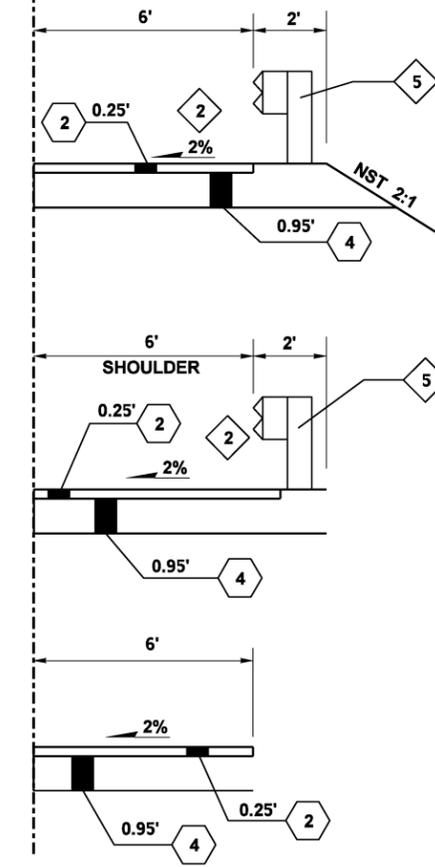
STATION RANGE	A	B	C
BL 1485+05.01 (RT) TO BL 1488+18.84 (RT)			
BL 1488+18.84 (LT) TO BL 1488+60.62 (LT)	12'	0'	26'
BL 1488+60.62 (LT) TO BL 1490+26.22 (LT)	12' - 0'	0'	26'
BL 1490+26.22 (LT) TO BL 1491+39.29 (LT)	0'	0'	26' - 17.8'
BL 1489+52.62 (RT) TO BL 1495+17.62 (RT)			

ROADWAY SECTION E-3

STATION RANGE	A	B	C
BL 1495+17.62 (RT) TO BL 1498+26.39 (RT)			
BL 1496+50.31 (LT) TO BL 1500+10.65 (LT)	0'	0'	15'

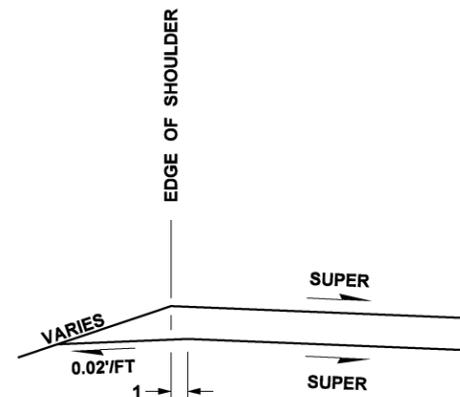
ROADWAY SECTION E-4

STATION RANGE	A	B	C
BL 1498+26.39 (RT) TO BL 1500+10.65 (RT)			

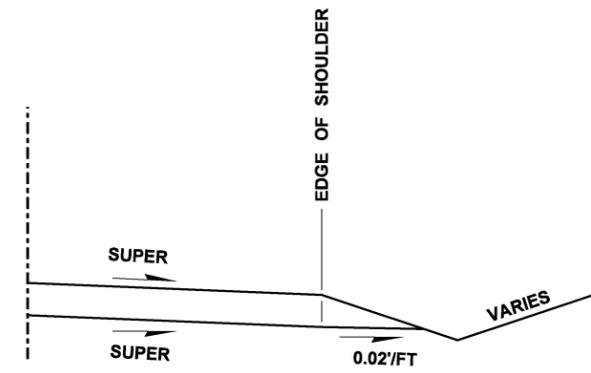


NOT TO SCALE

FILE NAME	J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F005.5_PS_RS.dgn	REGION NO.	10	STATE	WASH	FED.AID PROJ.NO.	NH-0000(000)	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 5.5 ROADWAY SECTION	Plot 7
TIME	10:24:18 AM	JOB NUMBER	00Z000	LOCATION NO.	SP1234	PLAN REF NO	RS6			
DATE	10/10/2013	CONTRACT NO.				SHEET				OF
PLOTTED BY	HIICI									SHEETS
DESIGNED BY	DESIGNER									
ENTERED BY	CAD OPERATOR									
CHECKED BY	TEAM LEAD									
PROJ. ENGR.	PROJECT ENGINEER									
REGIONAL ADM.	REGIONAL ADM.	REVISION		DATE	BY					



**SHOULDER DESIGN
OUTSIDE OF CURVE**



**SHOULDER DESIGN
INSIDE OF CURVE**

FILE NAME		J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F005.7_PS_RS.dgn		REGION NO.	STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 5.7 ROADWAY SECTION	PLAN REF NO
TIME	10:26:15 AM			10	WASH	NH-0000(000)			RS8
DATE	10/10/2013			JOB NUMBER					SHEET
PLOTTED BY	HIIICI			CONTRACT NO.		LOCATION NO.			OF
DESIGNED BY	DESIGNER					SP1234			SHEETS
ENTERED BY	CAD OPERATOR								
CHECKED BY	TEAM LEAD								
PROJ. ENGR.	PROJECT ENGINEER								
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY					

ALIGNMENT, RIGHT OF WAY, AND LIMITED ACCESS

ALIGNMENT

Construction centerline stationing must be continuous in one direction (usually south to north for odd numbered highways and west to east for even numbered highways). Do not include overlap equations because they create duplicate stations.

For example, the (70+00.000 BK = 65+00.000 AHD equation is not acceptable because there will be two of each of the following stations: 56~, 66~, 67~, 68~, 69~ and 70~. You can correct this problem by simply adding "100" to the AHD stationing (70+00.000 BK = 165+00.000 AHD).

If you establish new construction stationing instead of using the stationing from the official right of way plans, equations are not an issue. It is recommended that you establish your own construction stationing. You will need to tie the established construction stationing to the R/W stationing at the beginning and end of the project.

The curve data box must be complete for all curves that appear on the plan sheet.

Corporate limits, county lines, Indian reservation boundaries, national forest boundaries and all park boundaries need to be shown. All bodies of water need to be named.

RIGHT OF WAY AND LIMITED ACCESS

The Right of Way (R/W) and Limited Access (L/A) on the construction plans must exactly match the approved R/W and L/A plans. In most cases, the R/W and L/A will be shown on a single approved plan.

The R/W centerline must be identified and shown if it is different than the construction centerline.

All R/W lines are solid lines in the construction plans; Limited Access (L/A) is shown using hachures; do not show parcel numbers.

If the project has limited access, the only access points through the L/A must be identified in the Access Approach Schedule on the approved R/W-L/A plans. If the driveway or approach is not on the Access Approach Schedule, it must not be constructed until the R/W-L/A plan has been updated to include the approach in question.

Show all permit and easement areas as well as turn-back lines. Fully describe the boundaries of the permit and easement areas using stationing and offsets.

If there are right of way parcels that have not cleared by the time the project goes on ad, they must be clearly identified on the Plans by cross-hatching, and all corners of the area not available must be described by station and offset. There is a GSP that must be included in the Contract Provisions that further describes the parcel and gives a date the property will be available to the contractor.

Show ties to all existing monuments.

Show ties to Railroad R/W, Railroad centerline, or both.

Show all known wetlands, including buffers that may possibly be affected by the project, even if they fall outside of the R/W.

COORDINATE CONTROL

The basis of bearings and distances is grid North as determined from Washington State Coordinate system north zone (NAD 83/91).

GPS Number		4037	
Project Datum			
	Northing	Easting	Elevation
Meters	785013.933	2384723.194	2908.70
US Feet	[239272.725]	[726865.083]	[886.584]
Washington State Plan Coordinate System			
	Northing	Easting	
Meters	456840.448	2056234.087	
US Feet	[139245.247]	[626741.403]	
Longitude	Latitude		Conv. Angle
W 119°07'36"	N 48°14'23"		1°16'13"

The distances shown are ground distances. To obtain the grid distance, multiply by the combined factor of 0.99980270. The combined factor is derived by multiplying the elevation factor of 0.99985679 by the scale of 0.99994590.

To obtain the Washing State Plane Coordinates, subtract 328083.3333 US ft. (100,000 meters) from the project coordinates (both Northing and Easting) then multiply by the combined factor of 0.99980270.

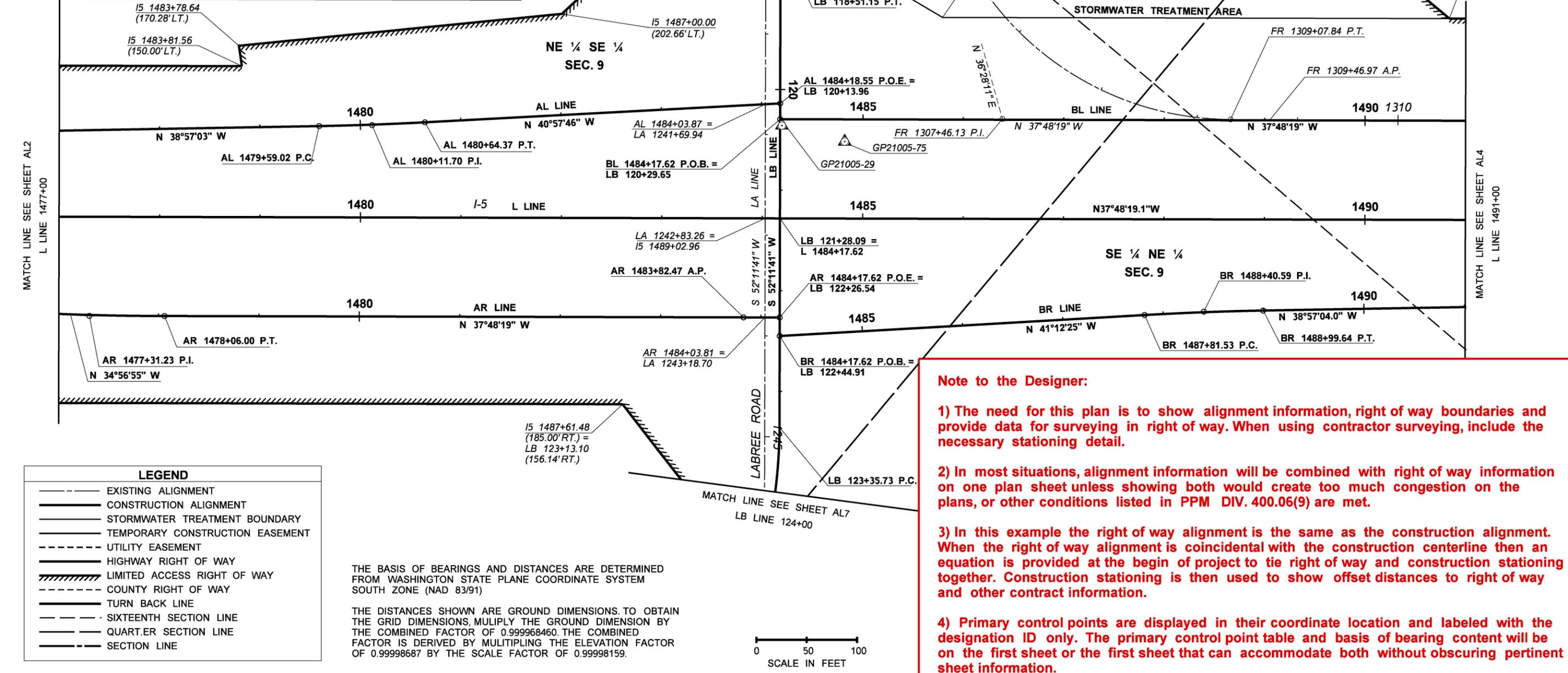
Refer to the [Highway Surveying Manual](#) for more information.

T. 13N. R. 2W. W.M.

CURVE DATA							
P.I. STATION	NORT.HING	EASTING	DELT.A	RADIUS	TANGENT	LENGTH	SUPER
FR 1307+46.13	809209.67	1357202.23	74°16'30" LT.	300.00'	227.20'	388.90'	
AL 1480+11.70	808718.52	1357592.87	2°00'42" LT.	3000.00'	52.68'	105.34'	4% LT.
AR 1477+31.23	808613.05	1357915.39	2°51'24" LT.	3000.00'	74.80'	149.57'	4% RT.
BR 1488+40.59	809485.54	1357229.98	2°15'21" RT.	3000.00'	59.06'	118.11'	-3% RT.

PRIMARY CONTROL TABLE					
HORIZONTAL DATUM SOUTH NAD (83/91) US feet			PROJECT DATUM COMBINED FACTOR 0.999968460		VERTICAL DATUM NAVD 88
DESIGNATION	NORTHING	EASTING	NORTHING	EASTING	ELEVATION
GP21005-28	477870.1204	1031576.3686	805997.9141	1359755.6784	222.523
GP21005-74	478119.6901	1031525.6043	806247.5070	1359704.9094	220.741
GP21005-29	480910.3866	1029161.1799	809038.4632	1357340.2650	230.646
GP21005-75	480969.4678	1029135.3138	809097.5499	1357314.3965	232.788

TRANSFORM SPC TO PDC (SPC US Feet * (1/CF)) + ((39.37/12) * 100000)=PDC
 TRANSFORM PDC TO SPC (PDC US Feet - ((39.37/12) * 100000)) * CF=SPC



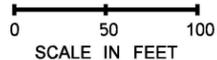
Note to the Designer:

- 1) The need for this plan is to show alignment information, right of way boundaries and provide data for surveying in right of way. When using contractor surveying, include the necessary stationing detail.
- 2) In most situations, alignment information will be combined with right of way information on one plan sheet unless showing both would create too much congestion on the plans, or other conditions listed in PPM DIV. 400.06(9) are met.
- 3) In this example the right of way alignment is the same as the construction alignment. When the right of way alignment is coincidental with the construction centerline then an equation is provided at the begin of project to tie right of way and construction stationing together. Construction stationing is then used to show offset distances to right of way and other contract information.
- 4) Primary control points are displayed in their coordinate location and labeled with the designation ID only. The primary control point table and basis of bearing content will be on the first sheet or the first sheet that can accommodate both without obscuring pertinent sheet information.

LEGEND	
	EXISTING ALIGNMENT
	CONSTRUCTION ALIGNMENT
	STORMWATER TREATMENT BOUNDARY
	TEMPORARY CONSTRUCTION EASEMENT
	UTILITY EASEMENT
	HIGHWAY RIGHT OF WAY
	LIMITED ACCESS RIGHT OF WAY
	COUNTY RIGHT OF WAY
	TURN BACK LINE
	SIXTEENTH SECTION LINE
	QUARTER SECTION LINE
	SECTION LINE

THE BASIS OF BEARINGS AND DISTANCES ARE DETERMINED FROM WASHINGTON STATE PLANE COORDINATE SYSTEM SOUTH ZONE (NAD 83/91)

THE DISTANCES SHOWN ARE GROUND DIMENSIONS. TO OBTAIN THE GRID DIMENSIONS, MULTIPLY THE GROUND DIMENSION BY THE COMBINED FACTOR OF 0.999968460. THE COMBINED FACTOR IS DERIVED BY MULTIPLYING THE ELEVATION FACTOR OF 0.99998687 BY THE SCALE FACTOR OF 0.99998159.



FILE NAME	c:\users\hillcl\pw_wsdot\0260152\PPM_Div_4_Example_4-19.dgn	REGION NO.	10	STATE	WASH	FED.AID PROJ.NO.	NH-0000(000)	Washington State Department of Transportation	EXAMPLE 4-19	Plot 3
TIME	9:37:45 AM	JOB NUMBER	00Z000	CONTRACT NO.		LOCATION NO.	SP1234			PLAN REF NO
DATE	12/26/2019									SHEET
PLOTTED BY	hillcl									OF
DESIGNED BY	DESIGNER									SHEETS
ENTERED BY	CAD OPERATOR									
CHECKED BY	TEAM LEAD									
PROJ. ENGR.	PROJECT ENGINEER									
REGIONAL ADM.	REGIONAL ADM.	REVISION		DATE	BY	P.E. STAMP BOX	DATE	P.E. STAMP BOX	DATE	

QUANTITY TABULATIONS

The quantity tabulation sheets are to directly precede the plans that show the construction feature. This may require several sets of quantity tabulation sheets distributed throughout the plans.

List the items in the same order and with the exact wording across the top of the sheets as they appear on the Summary of Quantities.

List the quantity tabulation codes in order down the left side in numerical order based on reference sheet number and item of work number.

The work indicated on the quantity tabulation sheets must also be identified on the Plan sheets. This can easily be done if the quantity tabulation sheets are used in the same manner as the structure notes for drainage. Use the reference sheet number and an item number to identify each item of work on the sheet. For example, "P27-2" would indicate that on reference sheet P27 there is an item of work identified by a "2" in a hexagon (or some other symbol). Use the same code system for quantity tabulation in order to prevent the need to note the beginning and ending of each item of work on the plans. This saves the need for excessive drafting on some projects and it can clean up a plan sheet.

If you use an Excel application to develop the quantity tabulation sheets, use blank rows and columns to add codes or items after the initial design and for an addendum. Check to make sure that the formulas are working for each column.

Cross-reference items of work if the quantities appear in more than one place in the plans in order for the contractor to locate all sheets where the quantities are shown.

If there are no profiles, you can place the grading, clearing, grubbing and other items normally found on the profiles on the Quantity Tabulation sheets. This typically involves small quantities in a few areas; describe each area of work stationing and offset.

If some of the work shown is being done under an agreement, include a general notes entry that indicates the agreement number.

Quantity Tabulations apply to many plan types such as Site Preparation, TESC, Paving, and Pavement Markings. The following figures represent typical quantity tabulation sheets.

SITE PREPARATION

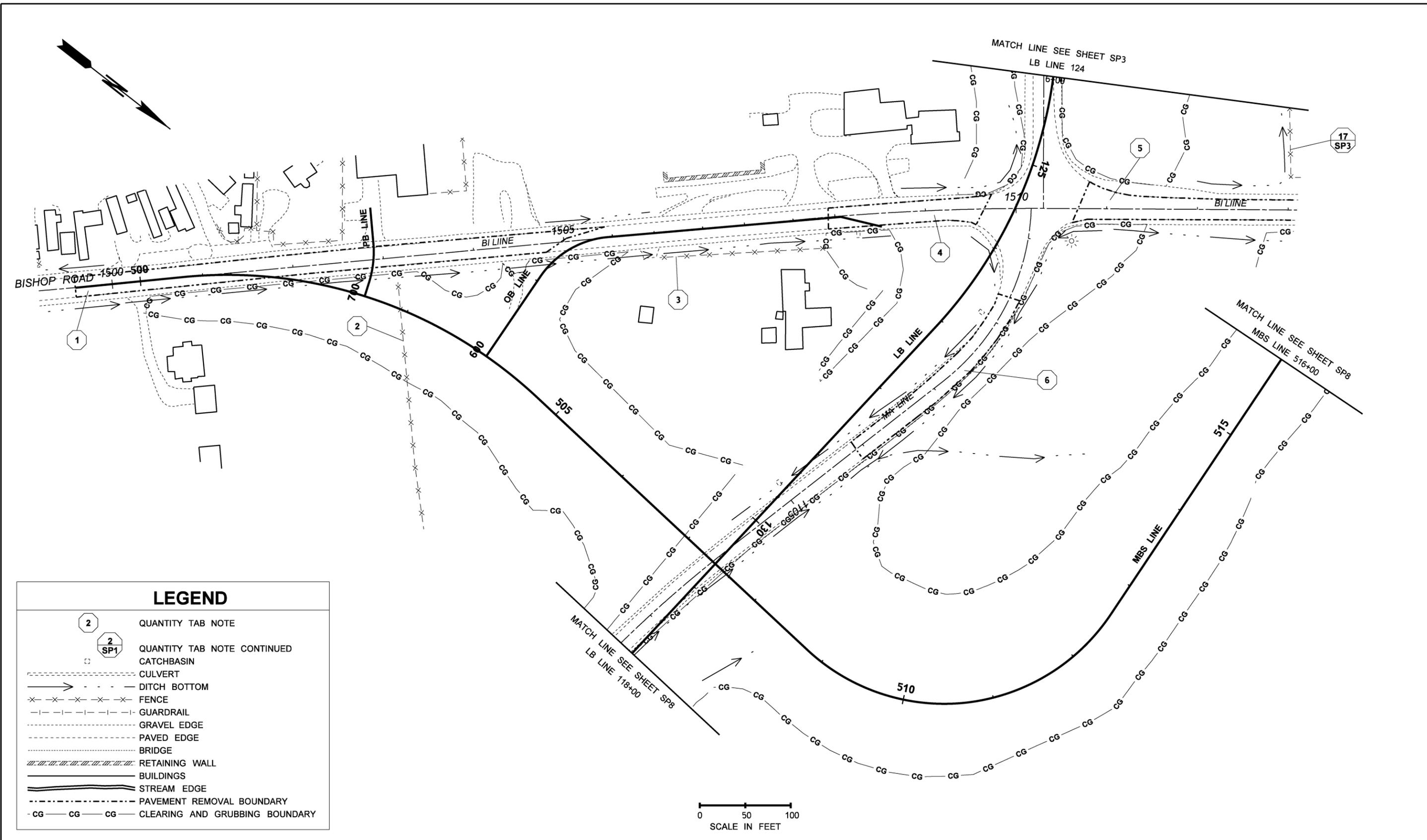
The site preparation plans show all existing topography and indicate items for removal or demolition.

Construction problems can be reduced or eliminated with more field reviews during design. Take the time to verify the field conditions!

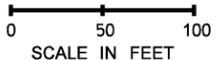
[RCW 19.122](#) mandates that existing utilities are shown on the construction plans; to that end designers must exercise due diligence and perform one or more of the following:

1. Discuss the project with the region Utilities Engineer.
2. Use the “Call Before You Dig” locate service.
3. Contact the local utility companies and municipalities.
4. **Do your own visual inspection.**
 - a. Note the overhead lines
 - b. Look for underground service cabinets
 - c. Look for junction boxes, valve boxes, manholes, catch basins, etc.
5. Don't forget WSDOT electrical conduits.

In most cases, it is not necessary to identify the exact utility locations. The contractor needs to know what utilities are going to be encountered in the various project areas. The contractor assesses the impact the utility may have on the work , and includes any additional cost in the unit bid prices for work affected by the utility. Sometimes the exact location of the utility is required to make sure that a new construction feature misses the existing utility. It is the designer's responsibility to verify that the correct level of detail is provided to allow the contractor to make a responsible bid.



LEGEND	
	QUANTITY TAB NOTE
	QUANTITY TAB NOTE CONTINUED
	CATCHBASIN
	CULVERT
	DITCH BOTTOM
	FENCE
	GUARDRAIL
	GRAVEL EDGE
	PAVED EDGE
	BRIDGE
	RETAINING WALL
	BUILDINGS
	STREAM EDGE
	PAVEMENT REMOVAL BOUNDARY
	CLEARING AND GRUBBING BOUNDARY



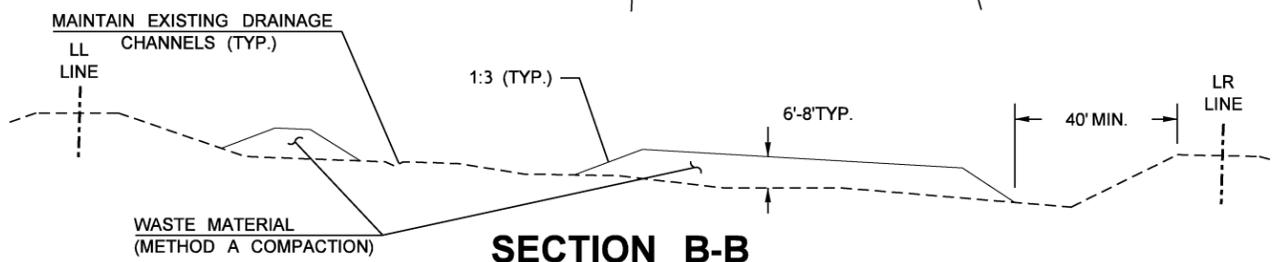
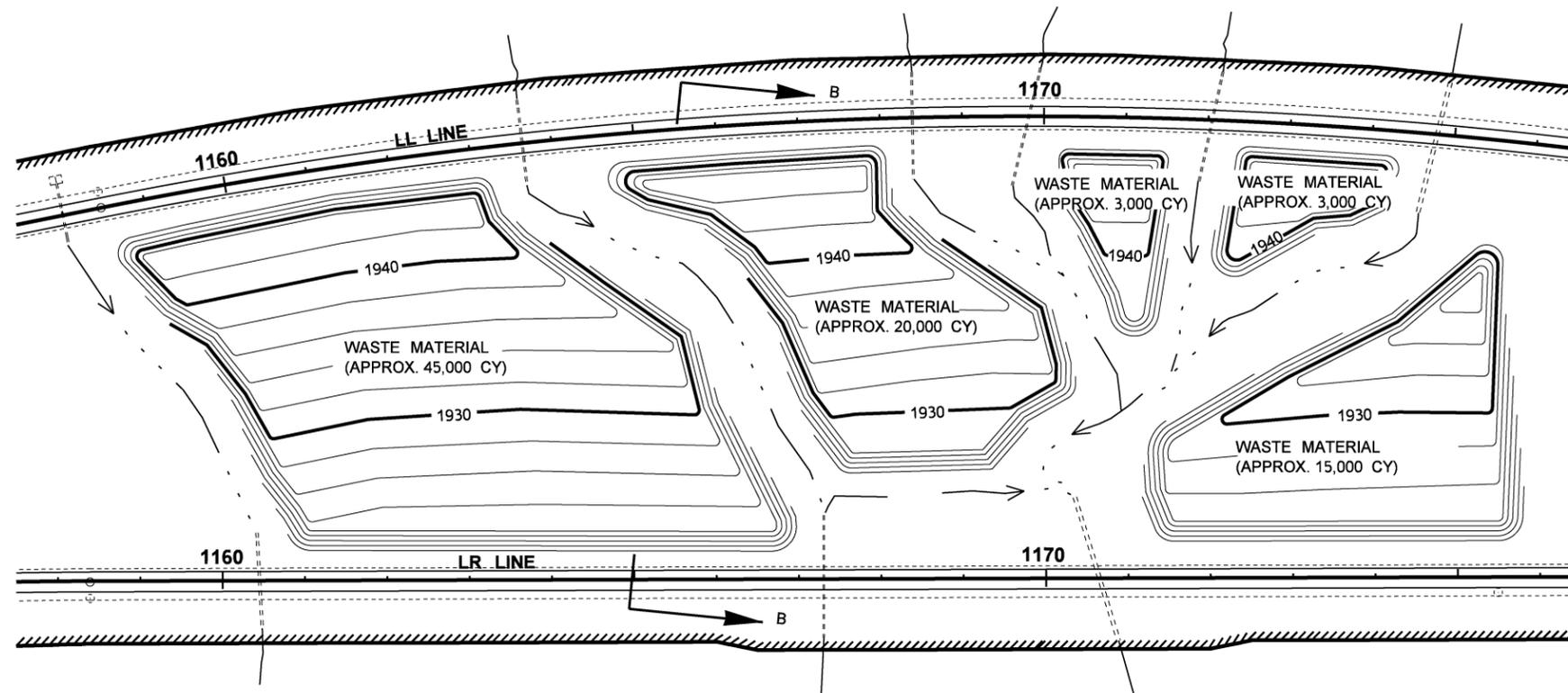
FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F010.0_PS_SP.dgn		REGION NO. 10		STATE WASH		FED.AID PROJ.NO. NH-0000(000)		 Washington State Department of Transportation		CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 8 SITE PREPARATION PLAN		PLAN REF NO. SP1	
TIME 10:48:56 AM	DATE 10/10/2013	JOB NUMBER 00Z000		CONTRACT NO.		LOCATION NO. XL-1234						SHEET OF SHEETS	
PLOTTED BY HIIICI	DESIGNED BY DESIGNER	ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEAD	PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.	REVISION	DATE	BY	P.E. STAMP BOX	DATE	P.E. STAMP BOX	DATE	

GRADING PLAN

This will often be combined with the R/W and alignment plans.

If the grading plan is combined with site preparation information, make sure that the utilities are shown. Show cut/fill lines as accurately as possible so that the proximity to the R/W line can be determined.

Show the limits of unsuitable foundation excavation.



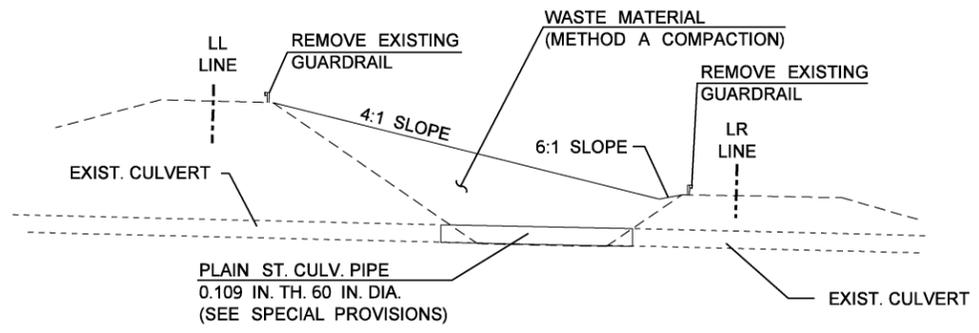
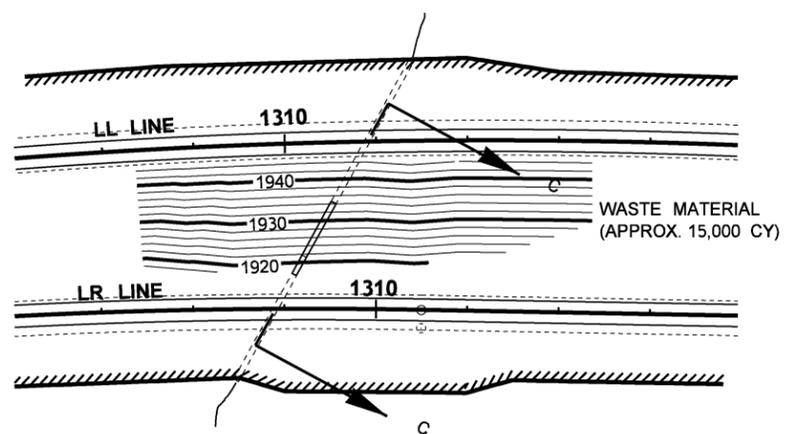
SECTION B-B

SEE SPECIAL PROVISIONS

NOT TO SCALE

NOTE:

BITUMINOUS MATERIAL SHALL NOT BE DEPOSITED AT THIS SITE.



SECTION C-C

SEE SPECIAL PROVISIONS

NOT TO SCALE

NOTE:

BITUMINOUS MATERIAL SHALL NOT BE DEPOSITED AT THIS SITE.

FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F009_PS_SP.dgn		REGION NO. 10		STATE WASH		FED.AID PROJ.NO. NH-0000(000)				CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 9		PLAN REF NO. CG1	
TIME 10:50:59 AM	DATE 10/10/2013	JOB NUMBER 00Z000		LOCATION NO. XL-1234		SHEET OF SHEETS							
DESIGNED BY DESIGNER	ENTERED BY CAD OPERATOR	REVISION	DATE	BY	DATE		DATE		CONTOUR GRADING PLAN				
CHECKED BY TEAM LEADER	PROJ. ENGR. PROJECT ENGINEER				P.E. STAMP BOX		P.E. STAMP BOX						
REGIONAL ADM. REGIONAL ADM.													

ROADWAY PROFILES

The roadway section limits is the first item shown on the top of the profile.

The North American Vertical Datum (NAVD) 88 datum symbol is to appear on all roadway profile sheets. However, in some situations, the National Geodetic Vertical Datum (NGVD) 27 may be acceptable.

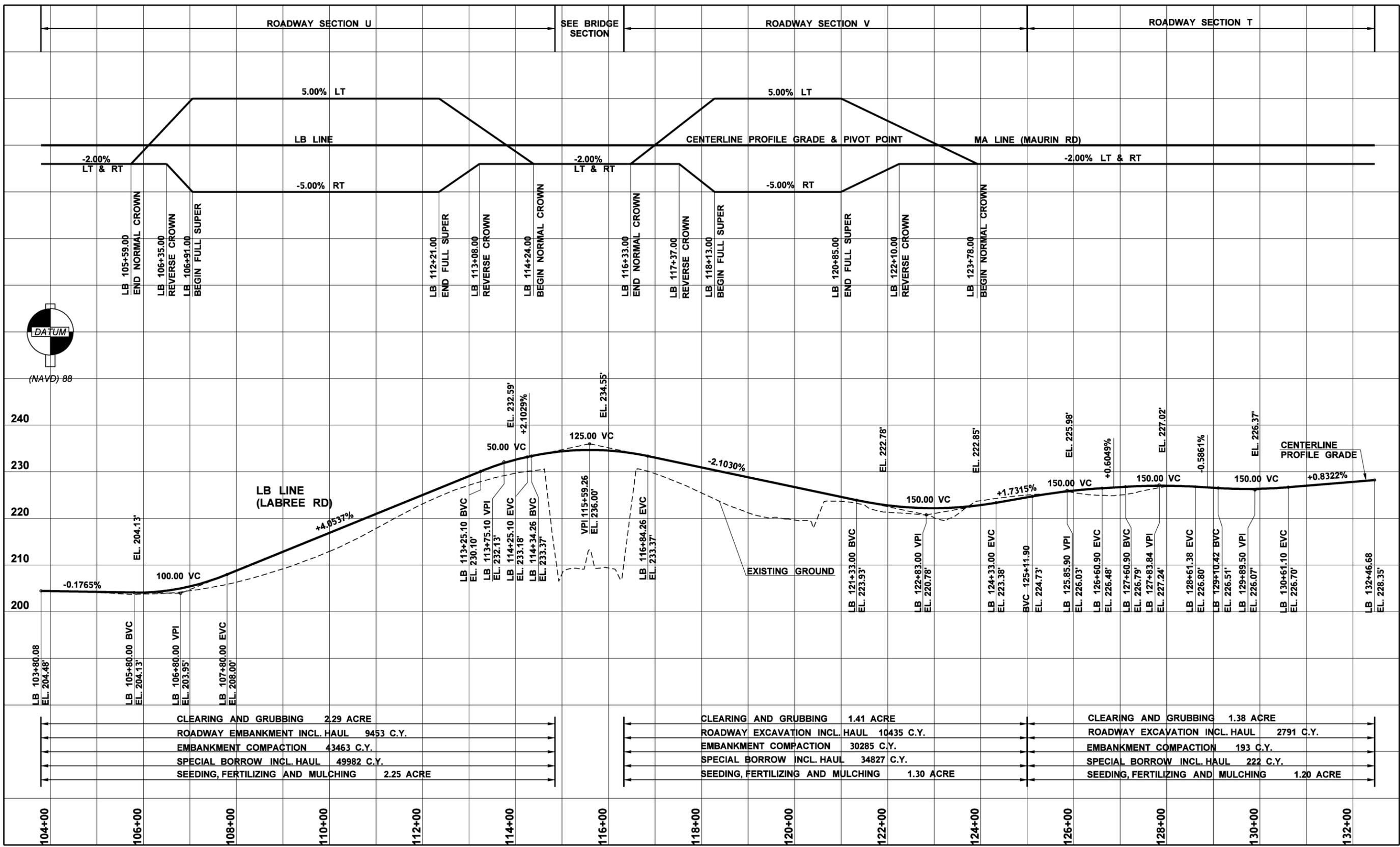
If there are existing temporary or permanent benchmarks that will be used to construct the project, they will appear fully described on the profiles at the appropriate station.

Items of work, with quantities, may be shown either all above the profile, all below the profile, or a combination. It is important, however, that once you establish a location for an item or quantity, it must stay on that line throughout the remainder of the profile sheets.

Show quantities so that the contractor can identify the location of the work. For example, do not show a 3-stations-total if the work is all in the first 100 feet. The 3-stations-total is intended to provide a quantity break for items that require continuous work along the length of the project without another reasonable or logical break.

Show the unsuitable foundation excavation limits on the profile sheets. As on the plan view, the unsuitable will be depicted, but will not be specifically tied to stations or elevations. This means that when the bottom of the excavation is drawn, it should not be represented by a straight line that would indicate that the bottom is at a specific elevation.

Superelevation diagrams are typically shown on the profile sheets. You can fit them on each sheet wherever they fit the best. If they do not fit, they may be placed on a separate sheet.



FILE NAME		REGION NO.		STATE		FED.AID PROJ.NO.		Washington State Department of Transportation		CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 10 ROADWAY PROFILE		Plot 8	
TIME	DATE	10	WASH	NH-0000(000)		LOCATION NO.						PLAN REF. NO.	
DESIGNED BY	DESIGNER	JOB NUMBER		SP1234		DATE		P.E. STAMP BOX		DATE		RP1	
ENTERED BY	CAD OPERATOR	CONTRACT NO.		00Z000		P.E. STAMP BOX		DATE		P.E. STAMP BOX		SHEET	
CHECKED BY	TEAM LEAD	REVISION		DATE		BY		DATE		P.E. STAMP BOX		OF	
PROJ. ENGR.	PROJECT ENGINEER	REVISION		DATE		BY		DATE		P.E. STAMP BOX		SHEETS	
REGIONAL ADM.	REGIONAL ADM.	REVISION		DATE		BY		DATE		P.E. STAMP BOX		SHEETS	

STRUCTURE NOTES

The Structure Note sheets directly precede the plans showing the construction feature. This may require several sets of structure note sheets distributed throughout the plans.

List the items in the same order and with the exact wording across the top of the sheets as they appear on the Summary of Quantities.

List the structure codes in order down the left side in numerical order based on reference sheet number and item of work number.

If you use an Excel application to develop the quantity tabulation sheets, use blank rows and columns to add codes or items after the initial design and for an addendum. Check to make sure that the formulas are working for each column.

Pipe alternates, in accordance with Chapter 8 of the Hydraulics Manual, must be provided.

Show the maximum height of cover for pipes on the Structure Notes sheets at the time of turn-in for review.

Cross-reference items of work if the quantities appear in more than one place in the plans in order for the contractor to locate all sheets where the quantities are shown.

If some of the work shown is being done under an agreement, a general notes entry should be included indicating the agreement number.

Structure Notes are applicable to multiple plan types such as Drainage, Utility, and Landscape. The following figures show Drainage Structure Notes. Other applicable plan types are similar.

STRUCTURE NOTES

NOTE: THE FIRST NUMBER OF THE "CODE DESIGNATION" BELOW REFERS TO THE SHEET NO. OR THE SHEET REFERENCE NO. SHOWING THE DRAINAGE FEATURE. THE SECOND NUMBER REFERS TO THE DRAINAGE FEATURE FOUND ON THAT SHEET.		REMOVING DRAINAGE STRUCTURE	ROADWAY EXCAVATION INCL. HAUL	EMBANKMENT COMPACTION		CATCH BASIN TYPE 4	CATCH BASIN TYPE 1	TESTING STORM SEWER PIPE	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.		POND CONC. PAD	POND OUTFALL		INLET PROTECTION	SILT FENCE	SEE GENERAL NOTES	GENERAL NOTES:	
																		CODE	LOCATION
D1-1	FR 7+22.00 (27.5' LT)					1		35	35									3,5	1. SEE SPECIAL PROVISIONS 2. CATCH BASIN TYPE 1 SEE CITY OF SPOKANE STD PLANS B-101C, B-112A, B-120, & B-1223. 3. CATCH BASIN TYPE 4 SEE CITY OF SPOKANE STD PLANS B-101F, B-120 Type 60A, & B-122 SEE WSDOT STD PLANS B-35.40-00 & B-40.40-00 4. MANHOLE 48 IN. DIAM. TYPE 1 SEE CITY OF SPOKANE STD PLANS B-112A, B-122, & Z-101 5. DRAIN INLET OR MANHOLE SEE DETAIL SHEET DD1 6. POND CONC. PAD OR POND OUTFALL SEE DETAIL SHEET DD1 7. CONNECT TO EXISTING PIPE 8. INLET PROTECTION SEE WSDOT STD PLAN 1-40.20-00 9. SILT FENCE SEE WSDOT STD PLAN 1-30.15-00 10. CONNECT WALL UNDERDRAIN PIPE TO STRUCTURE 11. CLEAN EXISTING DRAINAGE STRUCTURE
D1-2	FR 7+50.00 (55.2' RT)					1		49	49									3,5	
D1-3	FR 7+60.00 (27.5' LT)					1		51	51									3,5	
D1-4	FR 7+93.30 (34.8' LT)	1																1	
D1-5	FR 8+05.70 (32.0' LT)	1																1	
D1-6	FR 8+10.30 (45.2' L T)					1		65	65									3,5	
D1-7	FR 8+87.10 (47.0' L T)	1																1	
D1-8	FR 9+07.30 (54.2' L T)	1																1	
D1-9	FR 9+11.40 (27.9' RT)	1																1	
D1-10	FR 9+12.80 (36.0' RT)	1																1	
D1-11	FR 9+33.70 (47.3' RT)					1		32	32									3,5	
D1-12	FR 9+62.70 (66.3' L T)					1		47	47			1						1,3,5,6	
D1-13	FR 10+30.90 (2.8' L T)	1																1	
D1-14	FR 10+50.10 (28.9' RT)	1																1	
D1-15	FR 10+52.00 (43.6' LT)	1																1	
D1-16	FR 10+60.00 (42.0' LT)					1		53	53			1						1,3,5,6	
D1-17	FR 10+60.00 (39.0' RT)					1		124	124									3,5	
D1-18	MKT 24+00.10 (3.5' RT)	1													1			1,8	
D1-19	MKT 24+05.30 (57.7' LT)					1		50	50									3,5	
D1-20	MKT 24+10.00 (4.0' LT)							174		174								4,5	
D1-21	MKT 24+13.40 (62.2' L T)	1													1			1,8	
D1-22	MKT 24+23.90 (68.0' L T)					1		19	19									3,5	
D1-23	MKT 24+57.20 (40.7' RT)					1		62	62									3,5	
D1-24	MKT 25+86.60 (8.0' LT)							134		134								4,5	
D1-25	MKT 27+20.00 (26.5' RT)					1		49		49		1						1,3,5,6	
D1-27	MKT 27+23.80 (8.0' LT)							31		31								4,5	
D1-28	MKT 27+30.00 (51.5' LT)					1		40	40									3,5	
D2-1	MKT 21+56.30 (16.0' RT)	1													1			1,8	
D2-2	MKT 21+57.10 (26.9' LT)																	11	
D2-3	MKT 21+71.90 (27.5' RT)					1		53	53						1			3,5,8	
D2-4	MKT 21 +88.1 0 (15.4' RT)																		
D2-5	MKT 21+88.50 (34.2' L T)	1													1			1,8	
SHEET TOTAL		13				14		1068	680	388		3						5	
PROJECT TOTAL		13				14		1068	680	388		3						5	

DESIGNED BY	C.HACKWORTH	ENTERED BY	L. ROBERTS	CHECKED BY	T. PARTRIDGE, P.E.	PROJ. ENGR.	L. LARSON, P.E.	REGION ADM.	K. METCALF, P.E.	DATE	DATE	REVISION	BY	REGION NO.	STATE	FED. AID PROJ. NO.			CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 11	SN 1
																NH-0395(098)			STRUCTURE NOTES	SHEET 30 OF 99 SHEETS

DRAINAGE PLANS

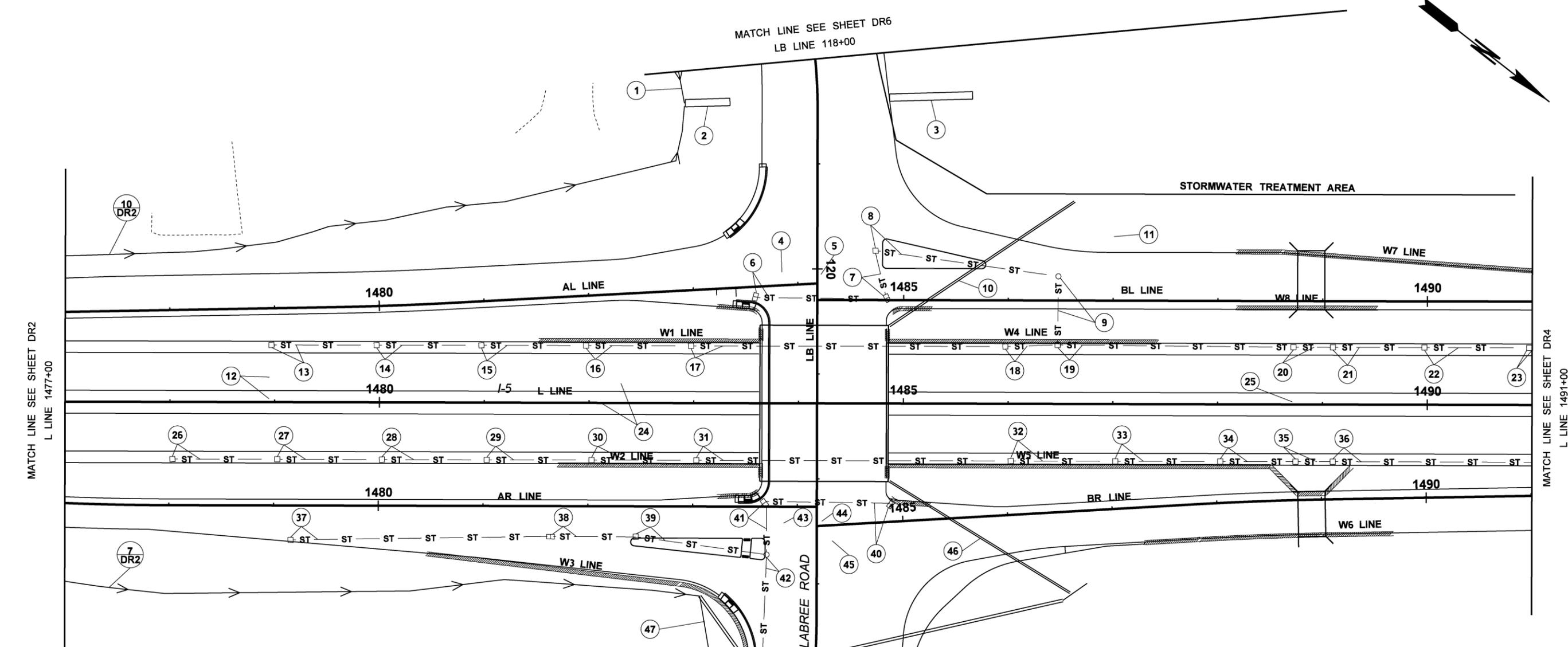
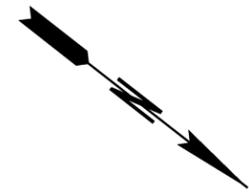
Drainage codes are typically numbered from left to right and top to bottom. Place the drainage item number inside a circle. The circle is reserved for drainage codes and is not to be used elsewhere in the plans.

If a drainage feature, such as a ditch, appears on more than one sheet, the structure code will be assigned on the first sheet on which the feature appears and that code will be shown on subsequent sheets, as the original reference sheet number over the original drainage item number, all within a circle.

Show angles for pipes placed on a skew, or tie each end of the pipe to centerline.

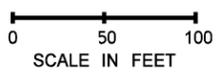
Use the [Standard Plans](#) when possible. If you do specify a Standard Plan, verify that it is appropriate for the conditions (i.e. can the specified drainage structure accept the size of pipe specified? Is there adequate clearance between two pipes connecting to the specified drainage structure?)

Make sure that what is being specified is buildable.



LEGEND

- 1 STRUCTURE NOTE CODE
- 7 DR2 STRUCTURE NOTE CODE CONTINUED
- STREAM EDGE
- EXISTING DITCH BOTTOM
- EXISTING CATCH BASIN
- EXISTING CULVERT
- DITCH BOTTOM
- ST — ST — STORM SEWER LINE
- BOX CULVERT
- CULVERT
- CATCH BASIN
- GRATE INLET
- MANHOLE



FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F012.0_PS_DP.dgn		REGION NO. 10		STATE WASH		FED.AID PROJ.NO. NH-0000(000)		 Washington State Department of Transportation		CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 12 DRAINAGE PLAN		PLAN REF NO. D1	
TIME 11:10:47 AM	DATE 10/10/2013	JOB NUMBER 00Z000		CONTRACT NO.		LOCATION NO. XL-1234						SHEET OF SHEETS	
PLOTTED BY HIIICI	DESIGNED BY DESIGNER	ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEAD	PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.	REVISION	DATE	BY	P.E. STAMP BOX	DATE	P.E. STAMP BOX	DATE	

DRAINAGE PROFILES

Draw drainage profiles to scale vertically. Although they are not always drawn to scale horizontally, they should be drawn proportionately so that distances and pipe grades appear correct relative to each other.

Pipes are to be drawn to the vertical scale (typically exaggerating the horizontal by 10) so the different size pipes are easily recognized.

Show pipe grades to a sufficient number of decimal places so that when you do the math, you get from the inlet flow-line to the outlet flow-line.

If drawn correctly, the drainage profiles can be used to determine the required height of manholes, and to make an estimate of the shoring or extra excavation quantities.

The horizontal distance shown is the distance from the center of structure to center of structure, not the length of pipe.

Show the structure note codes for all features, with the sheet reference number over the drainage item code number.

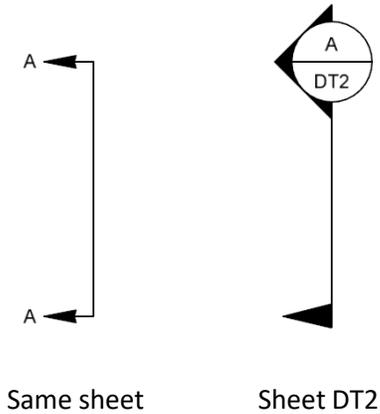
In order to make the profiles easier to relate to the plan layout, use rectangles to represent catch basin and elongated triangles to represent manholes.

Leave plenty of space on drainage profile sheets for revisions. This is not the place to be saving paper by packing too much information on a sheet.

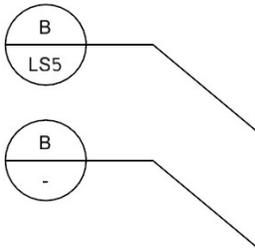
DETAILS

Details typically show specific information not practical to show on the plan view. Details are at a much greater scale (zoomed in) and must either note "Not to Scale" or include an appropriate scale bar. A standard scale intersection plan view may include a circle tied to a zoomed in view of a corner for greater detail of information. The plan view will be marked with a detail designation symbol indicating the detail identifier and the sheet the detail is on. If the detail is designated as common or "typical" to multiple locations, the name of the detail must be consistent with the applicable location callouts in the plan view.

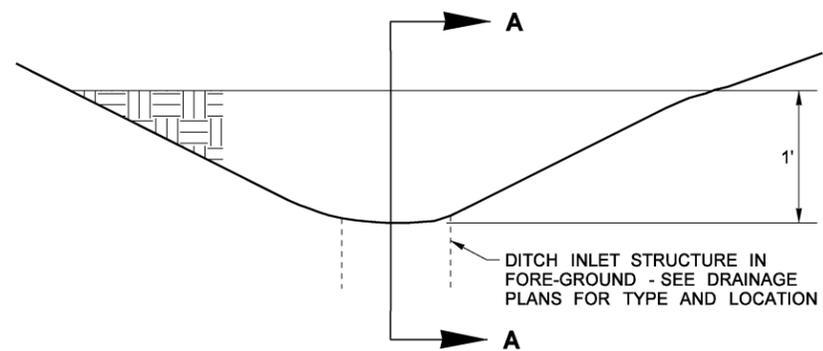
Example detail section "A" call outs:



Example detail "B" call outs:

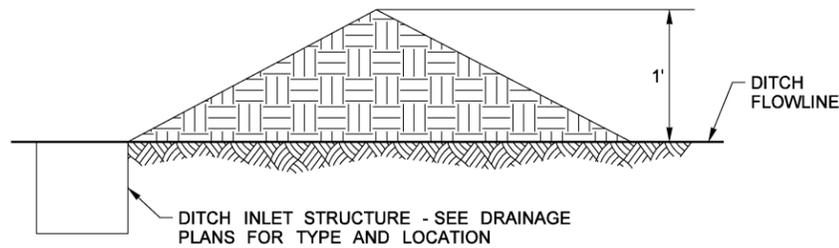


Standard Plans are often used to initiate development of project specific details. However, Standard Plans as they are provided should not be included as project details.

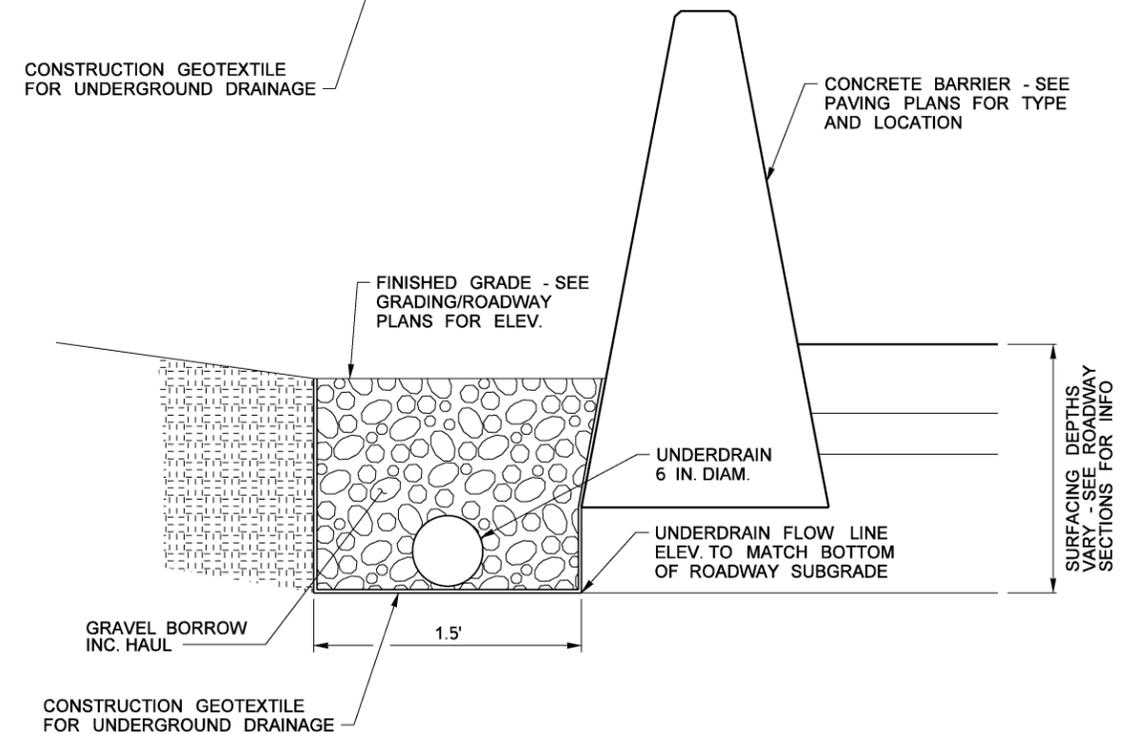
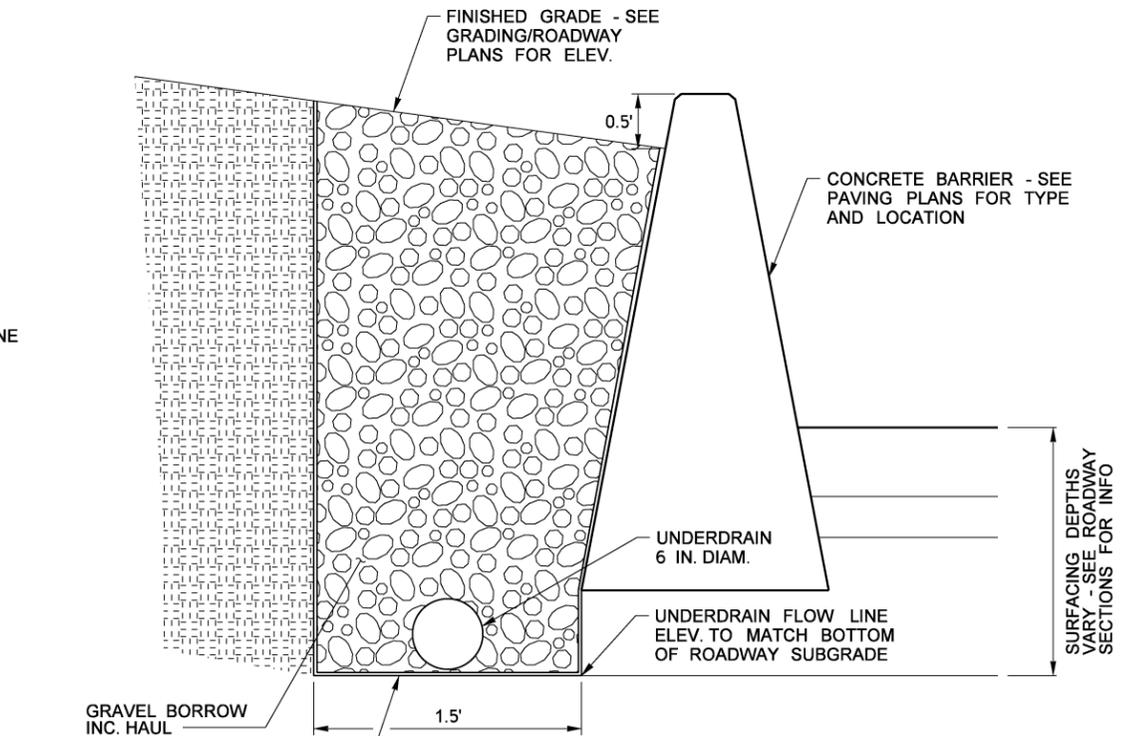


ELEVATION

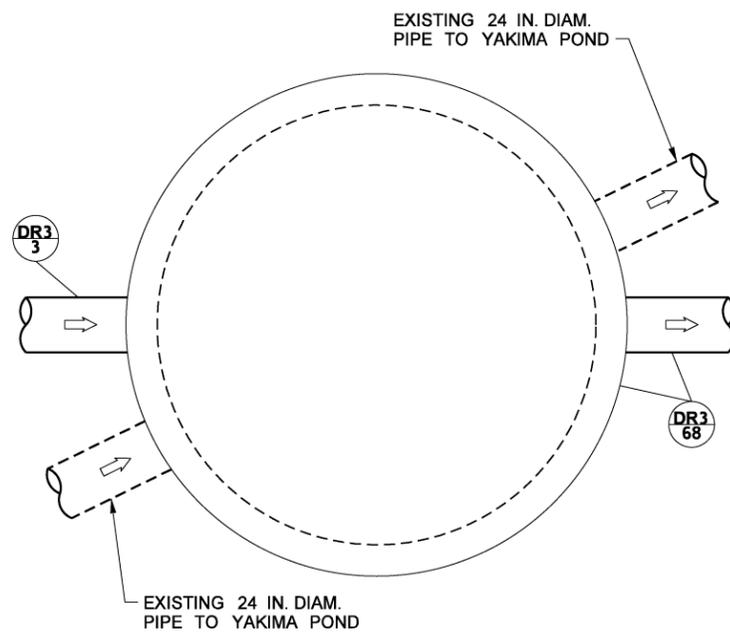
**EARTH CHECK DAM
NOT TO SCALE**



SECTION A

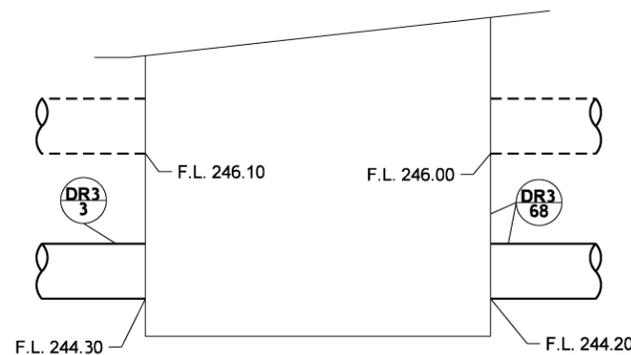


**CONCRETE BARRIER WALL UNDERDRAIN
NOT TO SCALE**



PLAN

**YAKIMA POND FLOW SPLITTER
NOT TO SCALE**



**REPRESENTATIVE SECTION
EXISTING FLOW LINES ARE
APPROXIMATE - FIELD VERIFY**

FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F014.0_DT_DD.dgn		REGION NO. 10		STATE WASH		FED.AID PROJ.NO. NH-0000(000)				CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 14		PLAN REF NO. DD1	
TIME 4:17:14 PM	DATE 10/10/2013	JOB NUMBER 00Z000		LOCATION NO. XL-1234		SHEET OF SHEETS							
DESIGNED BY DESIGNER	ENTERED BY CAD OPERATOR	CONTRACT NO.		DATE		DATE		DRAINAGE DETAILS					
CHECKED BY TEAM LEAD	PROJ. ENGR. PROJECT ENGINEER	REVISION		DATE		DATE							
REGIONAL ADM. REGIONAL ADM.													

WETLAND MITIGATION PLANS

When the Wetland or Wetland Mitigation Area is shown in the plans, show both the Wetland or the Wetland Mitigation Area and the Buffer Zone. It is also important to distinguish between wetlands (existing) and wetland mitigation areas (existing and proposed) so that in the future these areas are determined to be wetlands and, therefore under regulation.

The following areas should be included:

- Swamps
- Marshes
- Bogs
- Potholes
- Wet meadows
- Mud flats
- Ponds
- Existing wetland mitigation areas
- Proposed wetland mitigation areas

The WSDOT Environmental Office has the responsibility to locate and identify wetlands. All wetlands within WSDOT jurisdiction have been identified, delineated and classified. All pertinent information should be on file in either the region or Headquarters Environmental offices.

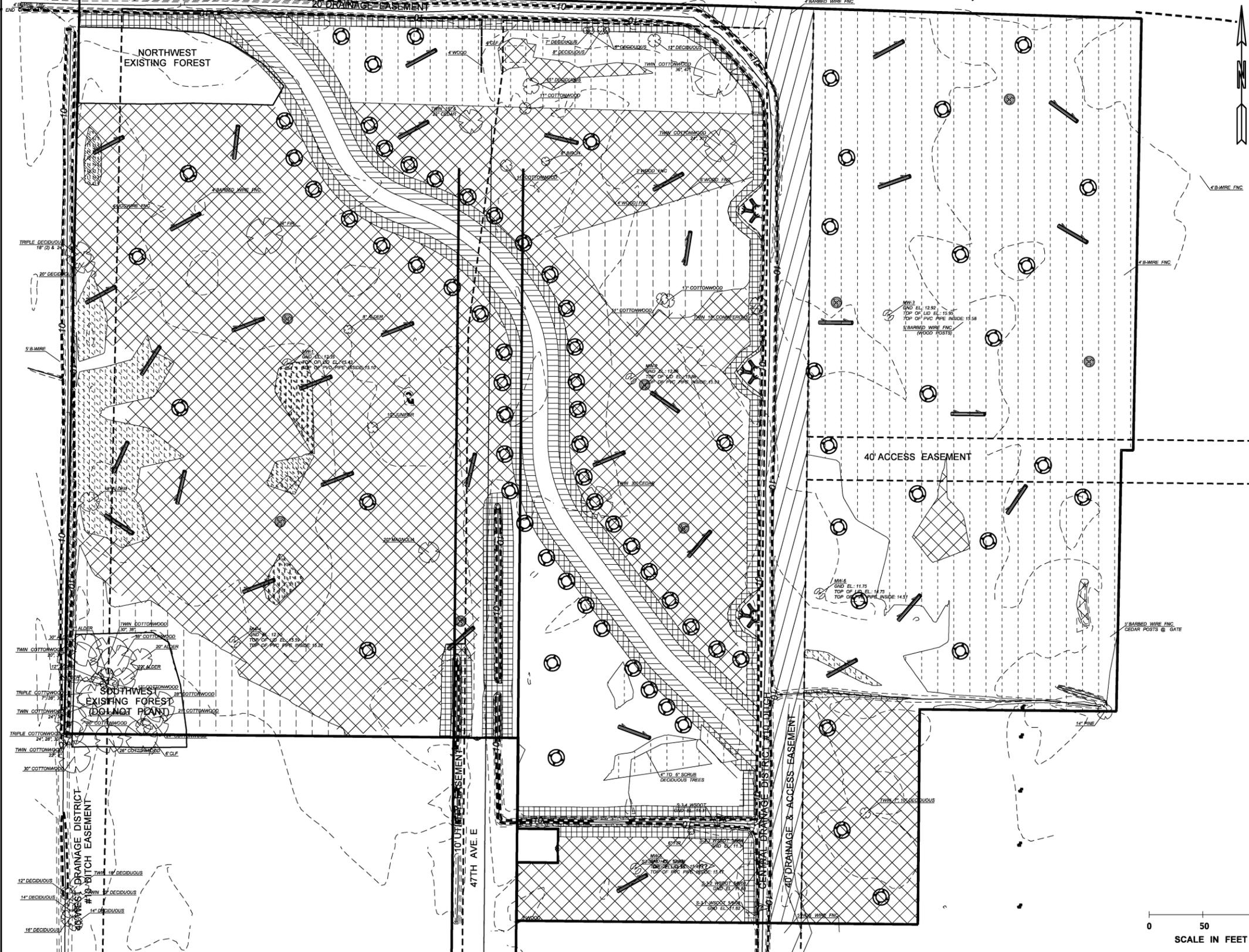
If the information for the wetland buffer zone is not available from WSDOT, then it is the project designer's responsibility to contact the Environmental Office for the county where the wetland is located. Each county is responsible for defining their wetland buffer zones for wetlands. Do not assume that the buffer zone for all wetlands is the same.

If the contractor is to be allowed to work in one of these areas, identify the Allowable Work Area.

STORMWATER TREATMENT AREAS

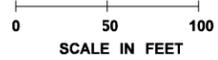
It is important to label stormwater treatment areas so that these areas will not be determined as wetlands, and therefore will not be covered by regulation.

SEC. 13, T. 20 N. R. 3E. W.M.



LEGEND

-  WETLAND AND TRANSITIONAL UPLAND PLANTING INCLUDING PLANTING MOUNDS (GREATER THAN 12.5' ELEVATION)
-  WETLAND SHRUB PLANTINGS (11.5' TO 12.5' ELEVATION)
-  WETLAND EMERGENT PLANTINGS (10.5' TO 11.5' ELEVATION)
-  STREAMBANK PLANTINGS (11.5' TO 12.5' ELEVATION)
-  TERRACE PLANTING
-  ACCESS AND MAINTENANCE EASEMENT (DO NOT PLANT)
-  MODIFIED WIRE FENCE
-  SNAG (NTS)
-  DOWNED LOG (NTS)
-  3-STUMP CLUSTER (NTS)
-  PLANTING MOUND



FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F015.0_PS_WM.dgn		REGION NO. 10	STATE WASH	FED.AID PROJ.NO. NH-0000(000)	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 15	PLAN REF NO. WM1				
TIME 4:40:15 PM	DATE 10/10/2013	JOB NUMBER 00Z000	CONTRACT NO.	LOCATION NO. XL-1234			SHEET OF SHEETS				
PLOTTED BY HIIICI	DESIGNED BY DESIGNER	ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEAD	PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.	REVISION	DATE	BY	P.E. STAMP BOX	DATE	P.E. STAMP BOX

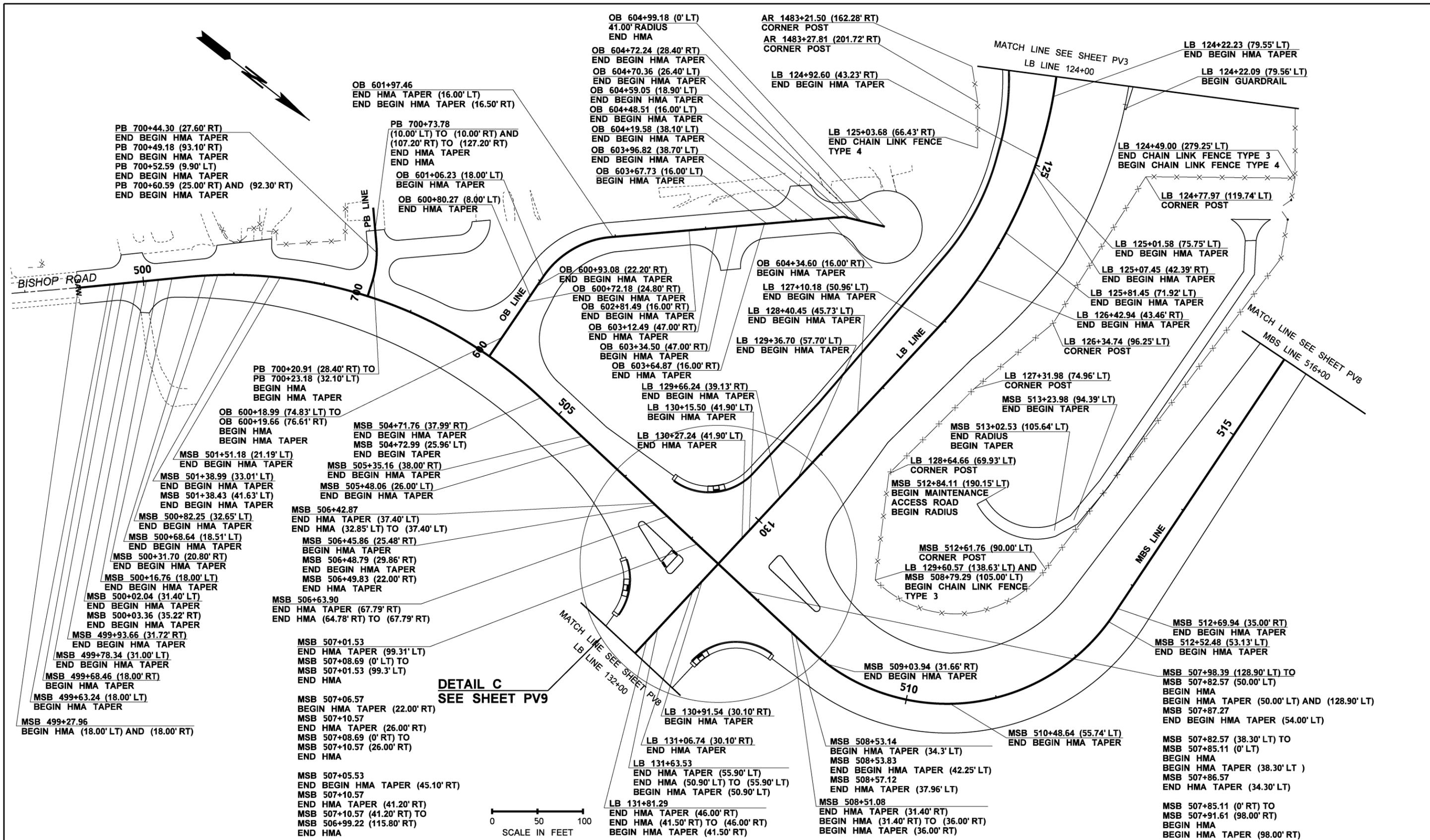
PAVING AND CHANNELIZATION PLANS

The paving and channelization plans can usually be combined. The paving plan must agree with the roadway sections.

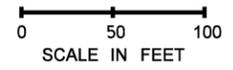
A paving plan is only required for areas such as intersections that cannot be adequately described by the roadway sections.

Show stationing for paving limits and all break points for the different types of channelization items required.

If needed, enlarge the scale for paving and channelization plans to show all of the information clearly.



DETAIL C
SEE SHEET PV9



FILE NAME J:\CPEP_ReviewCourse\DGNS\Clintt\CPEP_F016.0_PS_PV.dgn		REGION NO. 10	STATE WASH	FED.AID PROJ.NO. NH-0000(000)		CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 16 PAVING PLAN	PLAN REF NO. PV7
TIME 9:40:32 AM	DATE 10/11/2013	JOB NUMBER 00Z000	CONTRACT NO.	LOCATION NO. XL-1234			SHEET OF SHEETS
DESIGNED BY DESIGNER	ENTERED BY CAD OPERATOR	PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.	REVISION	DATE	BY	

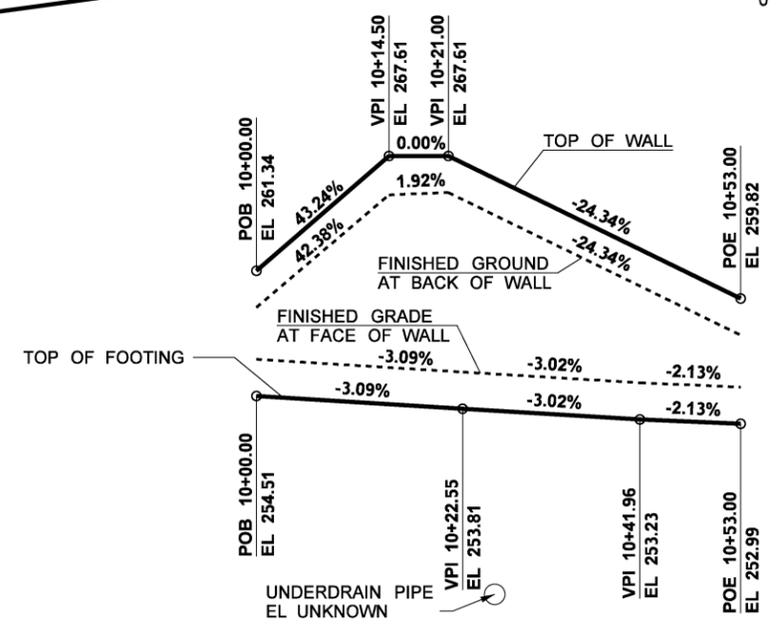
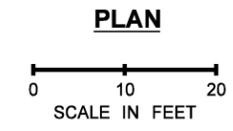
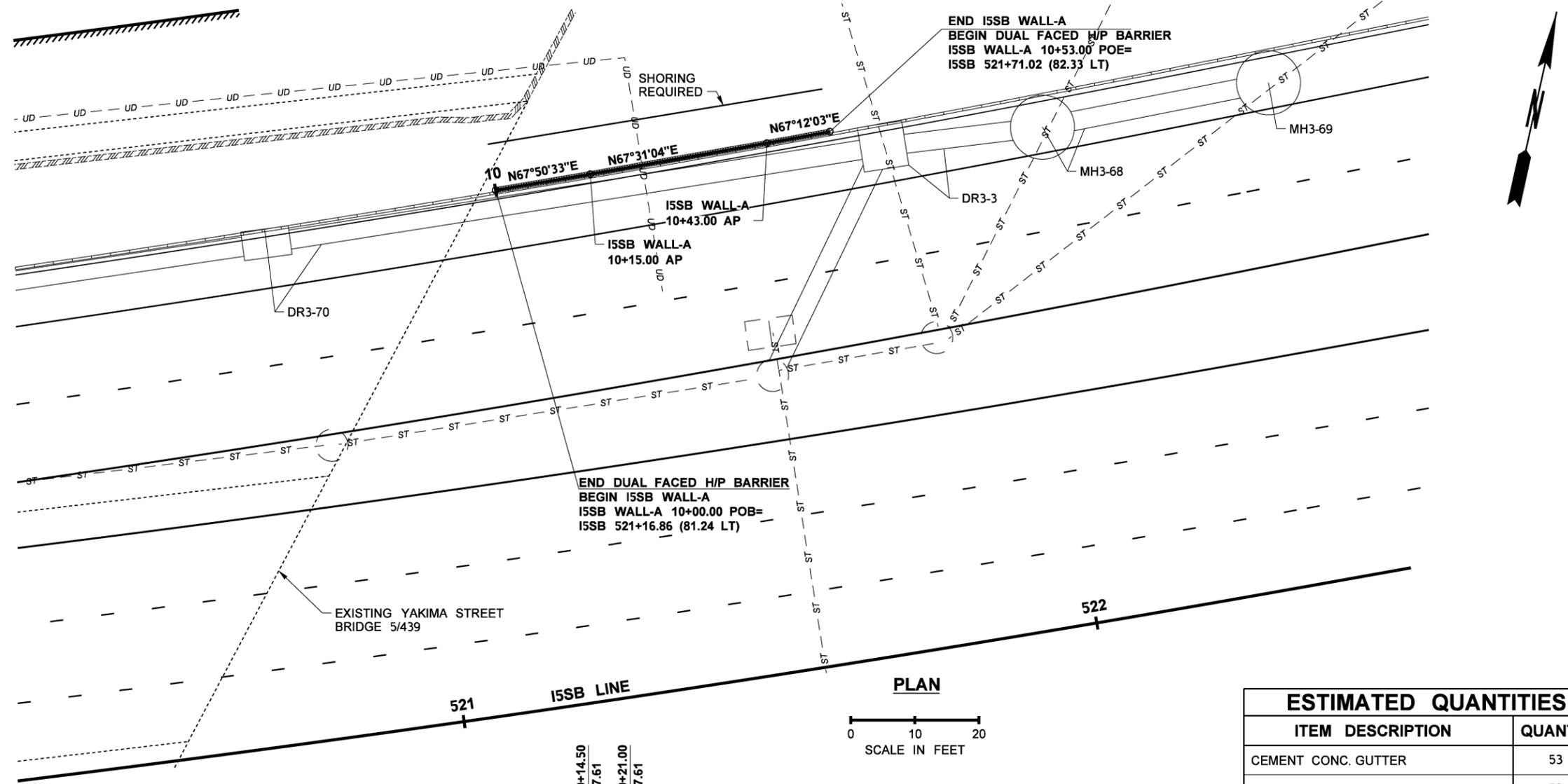
MINOR STRUCTURES

Show quantities for minor structures such as retaining and noise walls, the concrete, steel and excavation quantities on a quantity tabulation sheet or tabulated on the detail sheet itself. The quantities need to be tabulated even if the retaining wall is constructed in accordance with a Standard Plan.

For lump sum items, such as Structure Carbon Steel, the tabulation must give an approximate, informational only, quantity that the contractor can use to arrive at the lump sum contract price.

When materials are included in the price of other items, such as pigmented sealer being included in the price of concrete, an approximate, and informational only, quantity must be provided so the contractor can make adjustments to the unit price for the item to account for the material being included.

Show quantities for minor drainage structures, such as headwalls or box culverts, the concrete, steel and excavation quantities on the Structure Note sheets.



PROFILE
I5SB WALL-A
STD PLAN WALL TYPE 3

ESTIMATED QUANTITIES	
ITEM DESCRIPTION	QUANTITY
CEMENT CONC. GUTTER	53 L.F.
UNDERDRAIN PIPE 6 IN. DIAM.	53 L.F.
STRUCTURE EXCAVATION CLASS A INCL. HAUL	196 C.Y.
GRAVEL BACKFILL FOR WALL	75 C.Y.
CONC. CLASS 4000 FOR RETAINING WALL	45 C.Y.
ST. REINF BAR FOR RETAINING WALL	2750 L.B.
GRAVEL BACKFILL FOR DRAIN	3 C.Y.
COATED CHAIN LINK FENCE TYPE 4	19 L.F.
CONSTRUCTION GEOTEXTILE FOR UNDERGROUND DRAINAGE	35 S.Y.

NOTES:
1. THE WALL QUANTITIES AS LISTED ON THIS SHEET ARE FOR THE CONVENIENCE OF THE CONTRACTOR AND ARE NOT GUARANTEED TO BE ACCURATE. THE QUANTITIES AS LISTED ON THE SUMMARY OF QUANTITIES SHALL TAKE PRECEDENCE OVER ANY QUANTITY LISTED ON THIS SHEET.

ALIGNMENT COORDINATES (FEET)		
STATION	NORTHING	EASTING
I5SB WALL-A 10+00.00	698084.86	1157789.48
I5SB WALL-A 10+53.00	698105.10	1157838.46

FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F017.0_PS_WA.dgn	REGION NO. 10	STATE WASH	FED.AID PROJ.NO. NH-0000(000)	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 17 WALL A PLAN PROFILE	PLAN REF NO. WA1					
TIME 9:42:12 AM	JOB NUMBER 00Z000	CONTRACT NO.	LOCATION NO. XL-1234			SHEET OF SHEETS					
DATE 10/11/2013	DESIGNED BY DESIGNER	ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEAD	PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.	REVISION	DATE	BY	P.E. STAMP BOX	DATE	P.E. STAMP BOX

ILLUMINATION, SIGNAL, ITS, AND SIGNING PLANS

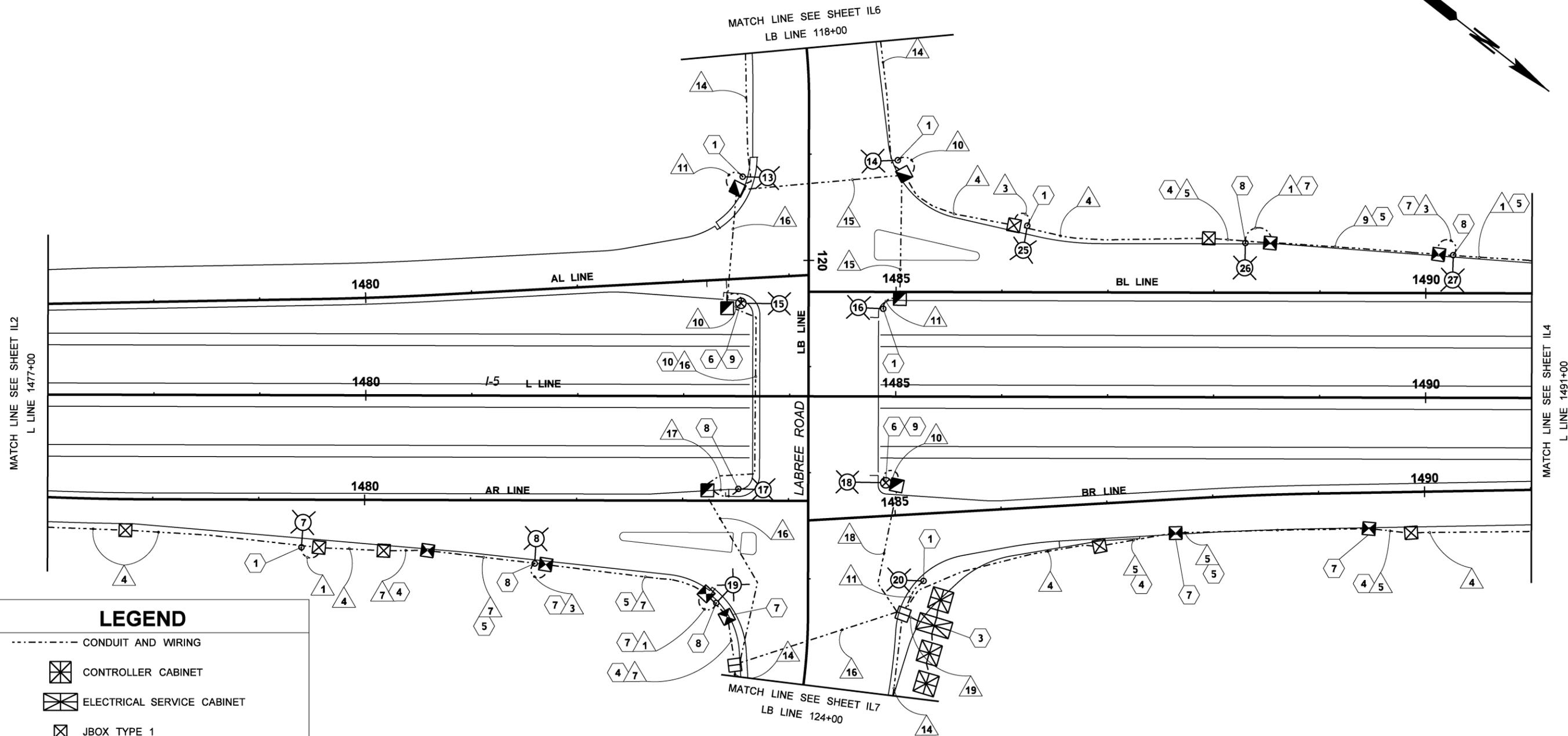
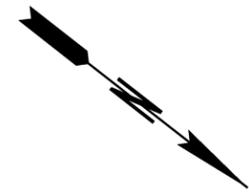
These plan sets are typically developed by Traffic and provide lighting, intelligent traffic flow monitoring and control, and driver information. They maintain a consistent look and feel with the rest of the plans with the addition of wiring schedules, signal standards charts, and signing specifications. Applicable construction notes are included at the beginning of each plan type. Schedules and charts associate plan view callouts with tabular notes and details similar to Quantity Tabs and Structure Notes.

The following problems are often found on electrical plans:

1. The scale is not large enough to show all of the required detail without appearing cluttered.
2. The site preparation plan, or some other equally cluttered plan sheet, is used for the basemap.
3. The office doing the electrical design is not kept informed of plan revisions in the area of the electrical work, resulting in construction conflicts or the plan showing the electrical system no longer looks like the same area, or both.

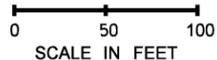
All of these problems can easily be avoided with planning and communication.

Illumination and signing plans are shown. Signals and Intelligent Transportation Systems (ITS) are similar.



LEGEND

- CONDUIT AND WIRING
- ⊠ CONTROLLER CABINET
- ⊞ ELECTRICAL SERVICE CABINET
- ⊠ JBOX TYPE 1
- ⊠ JBOX TYPE 2
- ⊠ JBOX TYPE 7 NO LOCK
- ⊠ JBOX NEMA
- ⊙ LIGHT STD SINGLE METAL
- SEE LUMINAIRE SCHEDULE
- # WIRE SCHEDULE NOTE
- # CONSTRUCTION NOTE



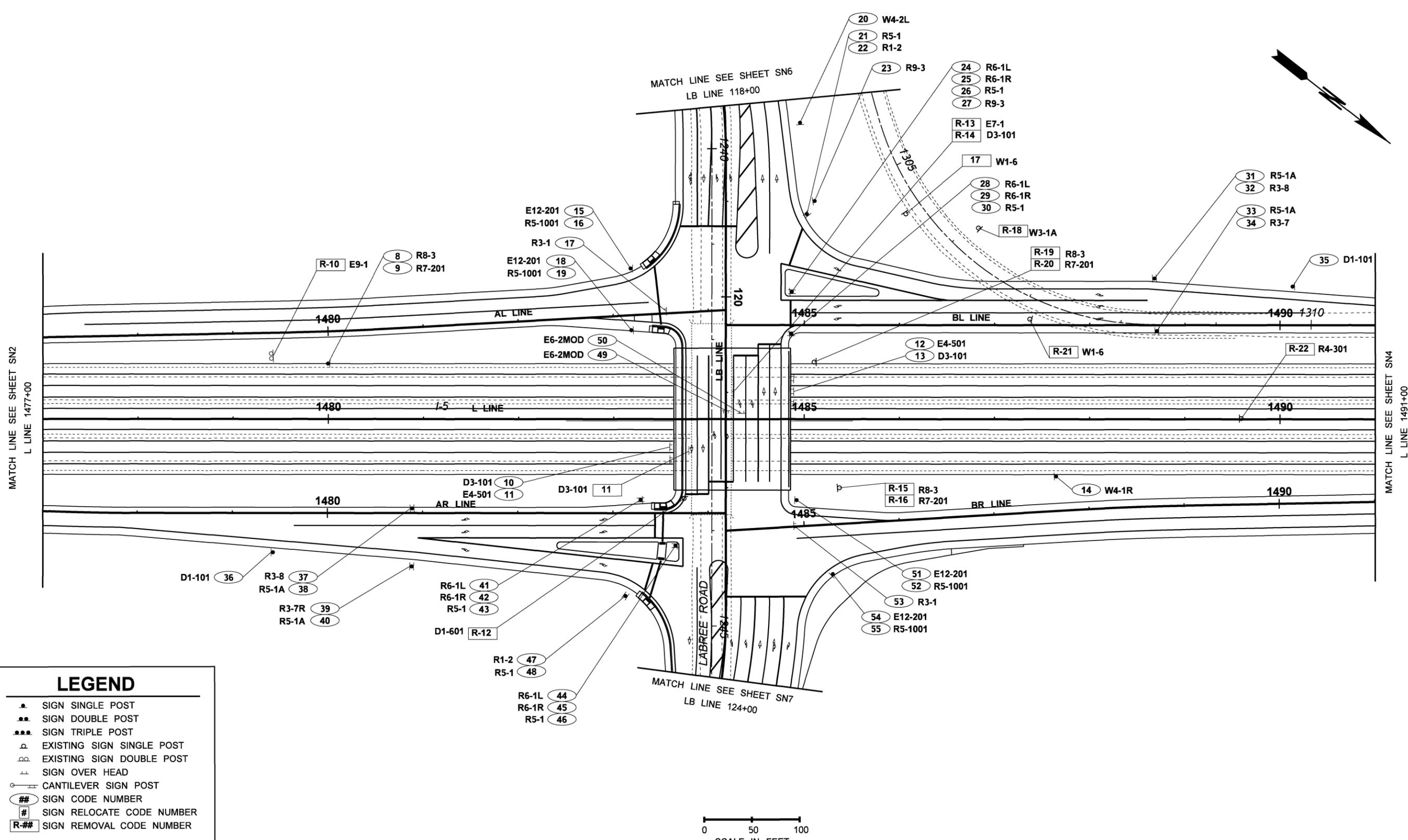
FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F018.0_PS_IL.dgn		REGION NO. 10		STATE WASH	FED.AID PROJ.NO. NH-0000(000)	 Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 18		PLAN REF NO IL3
TIME 9:44:14 AM	DATE 10/11/2013	JOB NUMBER 00Z000		LOCATION NO. XL-1234	SHEET OF SHEETS				
PLOTTED BY HIIICI	DESIGNED BY DESIGNER	ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEAD	PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.		ILLUMINATION PLAN		
REVISION	DATE	BY			P.E. STAMP BOX	DATE			

LUMINAIRE SCHEDULE				SERVICE NO. S*** ****				
LUMINAIRE NUMBER	CIRCUIT	LOCATION		TYPE - DISTRIBUTION - WATTAGE	MAST ARM	H1	BASE TYPE	COMMENTS
		STATION	OFFSET					
1	*	L 1453+06.4	68.6'LT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
2	*	L 1455+44.3	73.4'LT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
3	*	L 1466+85.4	77.1'LT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
4	*	L 1469+17.5	89.0'RT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
5	*	AL 1473+78.4	33.6'LT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
6	*	AL 1476+10.4	38.4'LT	III - MED CUTOFF - 310 HPS	16'	40'		
7	*	AR 1479+40.4	44.8'RT	III - MED CUTOFF - 310 HPS	16'	40'		
8	*	AR 1481+60.6	59.6'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	ON WALL
9	*	LB 115+59.2	51.9'RT	III - MED CUTOFF - 310 HPS	16'	40'		
10	*	LB 115+51.7	51.7'LT	III - MED CUTOFF - 310 HPS	16'	40'		
11	*	LB 117+39.2	57.3'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
12	*	LB 117+31.7	69.9'LT	III - MED CUTOFF - 310 HPS	16'	40'		
13	*	LB 119+12.8	55.5'RT	III - MED CUTOFF - 310 HPS	16'	40'		
14	*	LB 119+05.5	83.8'LT	III - MED CUTOFF - 310 HPS	16'	40'		
15	*	LB 120+40.6	63.9'RT	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
16	*	LB 120+45.5	70.4'LT	III - MED CUTOFF - 310 HPS	16'	40'		
17	*	LB 122+15.4	65.9'RT	III - MED CUTOFF - 310 HPS	16'	40'		
18	*	LB 121+87.2	74.5'LT	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
19	*	LB 123.22.9	86.5'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	ON WALL
20	*	LB 123+01.7	109.0'LT	III - MED CUTOFF - 310 HPS	16'	40'		
21	*	LB 125+59.8	57.3'RT	III - MED CUTOFF - 310 HPS	16'	40'		
22	*	LB 124+54.9	85.7'LT	III - MED CUTOFF - 310 HPS	16'	40'		
23	*	LB 126+04.3	53.5'RT	III - MED CUTOFF - 400 HPS	16'	40'	FIXED	
24	*	LB 126+06.8	75.2'LT	III - MED CUTOFF - 400 HPS	16'	40'	FIXED	
25	*	BL 1486+23.8	62.7'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
26	*	BL 1488+29.6	46.9'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	ON WALL
27	*	BL 1490+25.7	35.9'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	ON WALL
28	*	BR 1492+42.2	38.2'RT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
29	*	BR 1494+74.2	33.7'RT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
30	*	L 1501+13.8	88.9'LT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
31	*	L 1503+45.8	77.3'LT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
32	*	L 1513+09.8	73.3'LT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
33	*	L 1515+41.9	68.7'LT	III - MED CUTOFF - 400 HPS	16'	40'	SLIP	
34	*	MSB 503+79.5	47.9'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
35	*	MSB 505+16.8	46.4'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
36	*	MSB 506+39.9	67.4'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
37	*	LB 127+56.5	56.4'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
38	*	LB 127+56.4	56.5'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
39	*	LB 129+03.3	56.4'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
40	*	LB 128+99.6	57.8'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
41	*	LB 130+02.7	62.4'RT	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
42	*	LB 130+21.4	50.4'LT	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
43	*	MSB 508+15.9	59.6'RT	III - MED CUTOFF - 310 HPS	16'	40'		ON SIGNAL STANDARD
44	*	MSB 508+36.4	88.3'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
45	*	MSB 510+11.1	66.4'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
46	*	MSB 509+93.9	39.6'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
47	*	MSB 512+02.1	61.7'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
48	*	MSB 512+00.4	41.6'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
49	*	LB 132+39.4	47.1'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
50	*	LB 132+33.0	63.8'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
51	*	LB 134+35.5	39.6'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
52	*	LB 134+23.5	63.6'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
53	*	LB 111+77.0	28.0'LT	III - MED CUTOFF - 310 HPS	16'	40'		
54	*	LB 111+72.6	42.1'RT	III - MED CUTOFF - 310 HPS	16'	40'		
55	*	LB 110+00.9	44.4'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
56	*	LB 109+48.5	34.3'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
57	*	LB 107+55.1	34.6'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
58	*	LB 107+55.2	33.4'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	

LUMINAIRE SCHEDULE				SERVICE NO. S*** ****				
LUMINAIRE NUMBER	CIRCUIT	LOCATION		TYPE - DISTRIBUTION - WATTAGE	MAST ARM	H1	BASE TYPE	COMMENTS
		STATION	OFFSET					
59	*	H 1731+32.5	34.6'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
60	*	H 1731+22.5	30.3'RT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	
61	*	H 1729+86.8	27.2'LT	III - MED CUTOFF - 310 HPS	16'	40'	FIXED	

WIRING SCHEDULE				SERVICE NO. ___ ___	
NO.	CONDUIT SIZE	CONDUCTORS		CIRCUIT	COMMENTS
		EXISTING	NEW		
1	1"		2-#8	A	ILLUMINATION
2	1 1/2"		2-#8	A	ILLUMINATION
3	1"		2-#8	B	ILLUMINATION
4	1 1/2"		4-#8	A,B	ILLUMINATION
5	2"		4-#8	A,B	ILLUMINATION
6	1 1/2"		SPARE	---	FUTURE
7	2"		2-#8	B	ILLUMINATION
8	2"		4-#8	A,B	ILLUMINATION
9	2"		SPARE	---	FUTURE
10	2"		2-#8	B	ILLUMINATION
11	2"		---	---	SEE SIGNAL PLANS
12	1"		2-#8	C	ILLUMINATION
13	1 1/2"		2-#8	D	ILLUMINATION
14	1 1/2"		4-#8	C,D	ILLUMINATION
15	2"		2-#8	D	ILLUMINATION
16	2"		SPARE	---	FUTURE
17	2"		8-#8	A,B,C,D	ILLUMINATION
18	2"		SPARE	---	FUTURE
19	2"		2-#8	D	ILLUMINATION
20	2-2"		SPARE	---	FUTURE
21	1"		2-#8	A	ILLUMINATION
22	2"		2-#8	A	ILLUMINATION
23	1"		2-#8	B	ILLUMINATION
24	2"		4-#8	A,B	ILLUMINATION
25	2"		2-#8	B	ILLUMINATION
26	1"		2-#8	C	ILLUMINATION
27	2"		2-#8	C	ILLUMINATION
28	1"		2-#8	D	ILLUMINATION
29	2"		4-#8	C,D	ILLUMINATION
30	2"		2-#8	D	ILLUMINATION
31	2"		8-#8	A,B,C,D	ILLUMINATION
32	2"		SPARE	---	FUTURE
33	2"		2-#6	F	SIGNAL POWER

FILE NAME	E:\HIIICL\ Training\ General\CPEP_ReviewCourse\DGNS\Clint\CPEP_F018.1_PS_IL.dgn			REGION NO.	STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 18.1 ILLUMINATION SCHEDULE	PLAN REF NO.
TIME	3:05:51 PM			10	WASH	NH-0000(000)			IL10
DATE	10/29/2013			JOB NUMBER					SHEET
DESIGNED BY	DESIGNER			CONTRACT NO.			OF		
ENTERED BY	CAD OPERATOR			LOCATION NO.			SHEETS		
CHECKED BY	TEAM LEAD								
PROJ. ENGR.	PROJECT ENGINEER								
REGIONAL ADM.	REGIONAL ADM.			REVISION	DATE	BY			



LEGEND	
	SIGN SINGLE POST
	SIGN DOUBLE POST
	SIGN TRIPLE POST
	EXISTING SIGN SINGLE POST
	EXISTING SIGN DOUBLE POST
	SIGN OVER HEAD
	CANTILEVER SIGN POST
	SIGN CODE NUMBER
	SIGN RELOCATE CODE NUMBER
	SIGN REMOVAL CODE NUMBER

0 50 100
SCALE IN FEET

FILE NAME	J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F019.0_PS_SN.dgn	REGION NO.	STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 19 SIGN PLAN	PLAN REF NO
TIME	9:46:20 AM	10	WASH	NH-0000(000)			SN3
DATE	10/11/2013	JOB NUMBER					SHEET
PLOTTED BY	HIICI	CONTRACT NO.					OF
DESIGNED BY	DESIGNER	LOCATION NO.					SHEETS
ENTERED BY	CAD OPERATOR						
CHECKED BY	TEAM LEAD						
PROJ.ENGR.	PROJECT ENGINEER						
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY	P.E. STAMP BOX	DATE	

SIGN SPECIFICATIONS

ROADSIDE SIGN STRUCTURES

SIGN NO.	SIGN CODE (DESCRIPTION)	LOCATION	SIGN SIZE		SHEETING TYPE	LETTER SIZE OR CODE	POST MATERIAL	POST SIZE	POST LENGTH				CLEARANCE		REMARKS
			X	Y					H 1	H 2	H 3	H 4	V	W	
1	R1-1 STOP	MP 9.03 RT	36"	36"	III or IV		WOOD	4"x6"	16'				7'	20'	
2	D3-103 STREET NAME	---	72"	16"	*	6" C	---	---	---				10'	---	INSTALL ABOVE SIGN NO. 1
3	W2-2L SIDE ROAD SYMBOL	MP 9.13 LT	36"	36"	II		WOOD	4"x6"	20'				7'	13'	
4	D3-201 SIDE ROAD NAME	---	60"	9"	II	5" C	---	---	---				6.25'	---	INSTALL BELOW SIGN NO. 3
5	R1-1 STOP	MP 9.29 RT	36"	36"	III or IV		WOOD	4"x6"	16'				7'	20'	
6	D3-103 STREET NAME	---	72"	16"	*	6" C	---	---	---				10'	---	INSTALL ABOVE SIGN NO. 5
7	W11-2 ADVANCE PED XING	MP 9.53 LT	36"	36"	II		---	---	---				7'	---	INSTALL ON EXISTING METAL 2"X2" POST
8	W-SPEC. CURVE RIGHT	MP 9.61 LT	36"	36"	II		WOOD	4"x6"	16'				7'	11'	
9	D3-201 SIDE ROAD NAME	---	60"	9"	II	5" C	---	---	---				6.25'	---	INSTALL BELOW SIGN NO. 8
10	W1-2R CURVE RIGHT	MP 9.62 RT	36"	36"	II		WOOD	4"x6"	18'				8'	9'	
11	W13-1(45) MPH	---	24"	24"	II		---	---	---				6'	---	INSTALL BELOW SIGN NO. 10
12	W2-2L SIDE ROAD SYMBOL	MP 9.66 RT	36"	36"	II		WOOD	4"x6"	16'				7'	9'	
13	D3-201 SIDE ROAD NAME	---	48"	9"	II	5" D	---	---	---				6.25'	---	INSTALL BELOW SIGN NO. 12
14	R1-1 STOP	MP 9.80 LT	36"	36"	III or IV		WOOD	4"x6"	16'				7'	27'	
15	D3-103 STREET NAME	---	54"	16"	*	6" D	---	---	---				10'	---	INSTALL ABOVE SIGN NO. 14
16	D1-201 DESTINATION	MP 9.80 RT	60"	48"	*	6" C/6" D	WOOD	6"X8"	16'				7'	14'	
17	W1-2L CURVE LEFT	MP 9.81 LT	36"	36"	II		WOOD	4"x6"	18'				8'	12'	
18	W13-1(40) MPH	---	24"	24"	II		---	---	---				6'	---	INSTALL BELOW SIGN NO. 17
19	W1-2R CURVE RIGHT	MP 9.83 RT	36"	36"	II		WOOD	4"x6"	18'				8'	14'	
20	W13-1(45) MPH	---	24"	24"	II		---	---	---				6'	---	INSTALL BELOW SIGN NO. 19
21	W2-2R SIDE ROAD SYMBOL	MP 9.88 LT	36"	36"	II		WOOD	4"x6"	16'				7'	16'	
22	D3-201 SIDE ROAD NAME	---	48"	9"	II	5" D	---	---	---				6.25'	---	INSTALL BELOW SIGN NO. 21
23	W1-2L CURVE LEFT	MP 9.95 LT	36"	36"	II		WOOD	4"x6"	18'				8.5'	8'	
24	W13-1(45) MPH	---	24"	24"	II		---	---	---				6.5'	---	INSTALL BELOW SIGN NO. 23
25	D10-201(10) MILE	MP 10.00 RT	14"	27"	II		WOOD	4"x4"	10'				4'	15'	
26	R1-1 STOP	MP 10.09 RT	36"	36"	III or IV		WOOD	4"x6"	16'				7'	20'	
28	W2-2L SIDE ROAD SYMBOL	MP 10.16 LT	36"	36"	II		WOOD	4"x6"	16'				7'	10'	
29	D3-201 SIDE ROAD NAME	---	48"	9"	II	5" C	---	---	---				6.25'	---	INSTALL BELOW SIGN NO. 28
30	W2-2R SIDE ROAD SYMBOL	MP 10.20 RT	36"	36"	II		WOOD	4"x6"	16'				7'	10'	
31	D3-201 SIDE ROAD NAME	---	48"	9"	II	5" C	---	---	---				6.25'	---	INSTALL BELOW SIGN NO. 30
32	R1-1 STOP	MP 10.27 RT	36"	36"	III or IV		WOOD	4"x6"	16'				7'	30'	
33	D3-103 STREET NAME	---	60"	16"	*	6" D	---	---	---				10'	---	INSTALL ABOVE SIGN NO. 32
34	W2-3(315 DEG.) SIDE ROAD	MP 10.95 RT	36"	36"	II		WOOD	4"x6"	16'				7'	13'	
35	D3-201 SIDE ROAD NAME	---	48"	9"	II	5" D	---	---	---				6.25'	---	INSTALL BELOW SIGN NO. 34
36	M1-701(SOUTH 161) ROUTE	MP 10.95 LT	24"	36"	II		WOOD	4"x4"	14'				7'	15'	
37	D10-201(11) MILE	MP 11.00 RT	14"	27"	II		---	---	---				4'	---	INSTALL ON EXISTING METAL 2"X2" POST

NOTES:

POST LENGTHS SHOWN ARE APPROXIMATE. FINAL VALUES SHALL BE DETERMINED IN THE FIELD PRIOR TO FABRICATION.
 STEEL POST SIZES SHOWN ARE AASHTO M183. FOR STRUCTURE AND MOUNTING DETAILS SEE STANDARD PLAN SHEET SERIES G.
 FOR CODE REFERENCES AND STANDARD SIGN LAYOUT DETAILS SEE WASHINGTON STATE "SIGN FABRICATION MANUAL".
 TYPE II FOR BACKGROUNDS; TYPE III OR IV FOR LETTERS, BORDERS & SYMBOLS.

FILE NAME: J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F020.0_PS_SS.dgn		REGION NO. 10		STATE WASH		FED.AID PROJ.NO. NH-0000(000)		 Washington State Department of Transportation		CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 20		PLAN REF NO SS1	
TIME: 9:47:07 AM	DATE: 10/11/2013	JOB NUMBER 00Z000		LOCATION NO. XL-1234		SHEET OF SHEETS							
PLOTTED BY: HIIICI	DESIGNED BY: DESIGNER	ENTERED BY: CAD OPERATOR	CHECKED BY: TEAM LEADER	PROJ. ENGR.: PROJECT ENGINEER	REGIONAL ADM.: REGIONAL ADM.	REVISION	DATE	BY	P.E. STAMP BOX		SIGN SPECIFICATIONS		

TRAFFIC CONTROL PLANS

Traffic control plans are project and site specific. WSDOT requires that contractors use the contract traffic control plans. If these plans are incomplete or not designed to current standards, WSDOT is responsible and liable for any resulting problems.

WSDOT must provide a detour if we have to close the State highway, even for a brief period. We cannot expect the traveling public to find its own way around the closure. Detour plans must include all required signing. Detours will usually require agreements with the owners of the detour routes.

Show the sign sizes and colors for all Traffic Control Signs on the Traffic Control plans. All construction warning signs (W-series) shall be:

- Size: 48 inches by 48 inches
- Color: Black letters on Orange Background

TRAFFIC CONTROL BID ITEMS

ITEM	UNIT
Temporary Concrete Barrier	foot
Resetting Concrete Barrier	foot
Temporary Impact Attenuator	each
Repair Impact Attenuator	estimate
Resetting Impact Attenuator	each
Truck Mounted Impact Attenuator	each
Operation of Truck Mounted Attenuator	hour
Temporary Pavement Marking	foot
Sign Covering	square foot
Temporary Illumination System	lump sum
Temporary Signal System	lump sum
Traffic Safety Drum	each
Sequential Arrow Sign	hour
Type III Barricade	each
Temporary Traffic Control Devices	lump sum
Contractor Piloted Traffic Control	hour
Emergency Traffic Control	estimate
Traffic Control Labor	hour
Traffic Control Vehicle	day
Traffic Control Supervisor	day
Construction Signs Class A	square foot
Portable Changeable Message Sign	hour
Delineation Light	foot
Resetting Delineation Light	foot

SIGN SPACING = X (FEET) (1)		
RURAL HIGHWAYS	60 / 65 MPH	800'±
RURAL ROADS	45 / 55 MPH	500'±
RURAL ROADS & URBAN ARTERIALS	35 / 40 MPH	350'±
RURAL ROADS, URBAN ARTERIALS RESIDENTIAL & BUSINESS DISTRICTS	25 / 30 MPH	200'± (2)
URBAN STREETS	25 MPH OR LESS	100'± (2)
ALL SIGNS ARE 48" x 48" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED.		

- (1) ALL SIGN SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS, AND DRIVEWAYS.
(2) THIS SIGN SPACING MAY BE REDUCED TO FIT ROADWAY CONDITIONS.

NOTES:

1. FLAGGING STATIONS SHALL BE ILLUMINATED DURING HOURS OF DARKNESS.
2. EXTEND DEVICE TAPER (L/3) ACROSS SHOULDER.
3. WHEN USED THE DOWNSTREAM TAPER DEVICE SPACING SHALL BE 20' O.C.
4. ALL SIGNS ARE CLASS B UNLESS OTHERWISE NOTED.
5. ALL SIGNS SHALL HAVE A BLACK LEGEND ON AN ORANGE BACKGROUND UNLESS OTHERWISE SPECIFIED.
6. MOTORCYCLES USE EXTREME CAUTION SIGNS (W21-1701) SHALL BE INSTALLED WHEN THE FOLLOWING CONDITIONS EXIST:
GROOVED PAVEMENT
ABRUPT LANE EDGE
STEEL PLATES
LOOSE GRAVEL OR EARTH
SPECIFIC SIGNS FOR EACH OF THE CONDITIONS NOTED SHALL BE INSTALLED ALONG WITH W21-1701.
7. SEE SPECIAL PROVISIONS FOR ALLOWABLE LENGTH OF CLOSURE.
8. FOR SECTION LESS THAN 2,000 FEET, CONTRACTOR MAY USE FLAGGING OPERATION WITH PRIOR APPROVAL FROM THE ENGINEER.
9. FOR WORK OPERATIONS SEPARATED MORE THAN 1000', ADDITIONAL TMA IS REQUIRED.

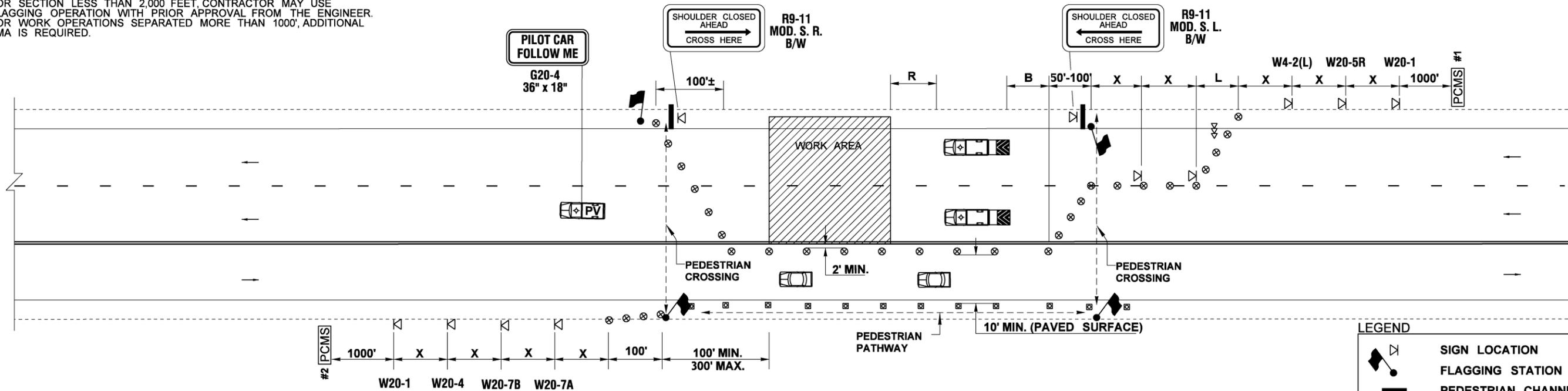
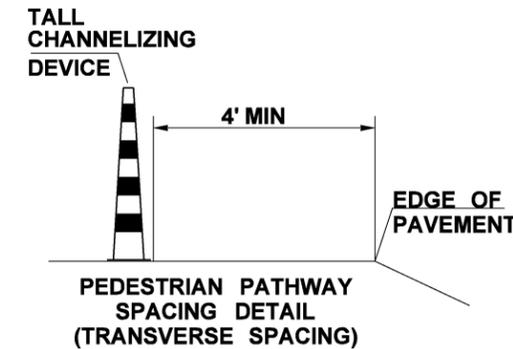
BUFFER DATA											
LONGITUDINAL BUFFER SPACE = B											
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70	
LENGTH (FEET)	155	200	250	305	360	425	495	570	645	-	
PROTECTIVE VEHICLE WITH TMA ROLL AHEAD DISTANCE = R											
TYPICAL PROTECTIVE VEHICLE TYPE WITH TMA	TYPICAL PROTECTIVE VEHICLE (WITH TMA) LOADED WEIGHT (LBS)									STATIONARY OPERATION (FEET)	
4 YARD DUMP TRUCK, SERVICE TRUCK, FLAT BED, ETC.	MINIMUM WEIGHT 15,000 LBS. (MAXIMUM WEIGHT SHALL BE IN ACCORDANCE WITH MANUFACTURER RECOMMENDATION)									30 MIN. 100 MAX.	
ROLL AHEAD STOPPING DISTANCE ASSUMES DRY PAVEMENT											

MINIMUM TAPER LENGTH = L (FEET)								
LANE WIDTH (FEET)	POSTED SPEED (MPH)							
	25	30	35	40	45	50	55	60
10	105	150	205	270	450	500	550	-
11	115	165	225	294	495	550	605	660
12	125	180	245	320	540	600	660	720

CHANNELIZING DEVICE SPACING		
POSTED SPEED (MPH)	IN TAPER (FEET)	IN TANGENT (FEET)
50 / 65	40	80
35 / 45	30	60
25 / 30	20	40

PCMS	
1	2
FLAGGER AHEAD	BE PREPARED TO STOP
1.5 SEC	1.5 SEC

FIELD LOCATE 1 MILE ± IN ADVANCE OF FLAGGER STATION



Notes to the Designer:

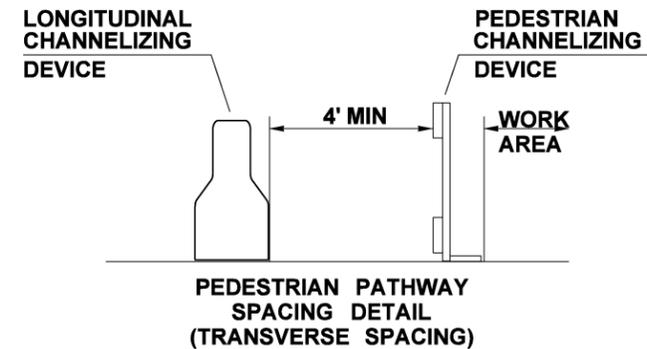
- 1) These WZTC plans are emphasizing the pedestrian access through the work zone.
- 2) These WZTC plans represents a mobile paving operation implementing ADA accessibility.

LANE CLOSURE WITH PILOT CAR (TYP.)
NOT TO SCALE

LEGEND	
	SIGN LOCATION
	FLAGGING STATION
	PEDESTRIAN CHANNELIZING DEVICE
	TRAFFIC SAFETY DRUMS
	TALL CHANNELIZING DEVICES
	PILOT VEHICLE
	TRANSPORTABLE ATTENUATOR
	MOTORIST VEHICLE
	SEQUENTIAL ARROW SIGN
	PORTABLE CHANGEABLE MESSAGE SIGN

FILE NAME	J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F021.0_PS_TC.dgn	REGION NO.	STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 21 TRAFFIC CONTROL PLAN	PLAN REF NO	TC1
TIME	9:47:48 AM	10	WASH				SHEET	
DATE	10/11/2013	JOB NUMBER	00Z000	LOCATION NO.			OF	
PLOTTED BY	HIICI	CONTRACT NO.					SHEETS	
DESIGNED BY	DESIGNER							
ENTERED BY	CAD OPERATOR							
CHECKED BY	TEAM LEAD							
PROJ. ENGR.	PROJECT ENGINEER							
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY				

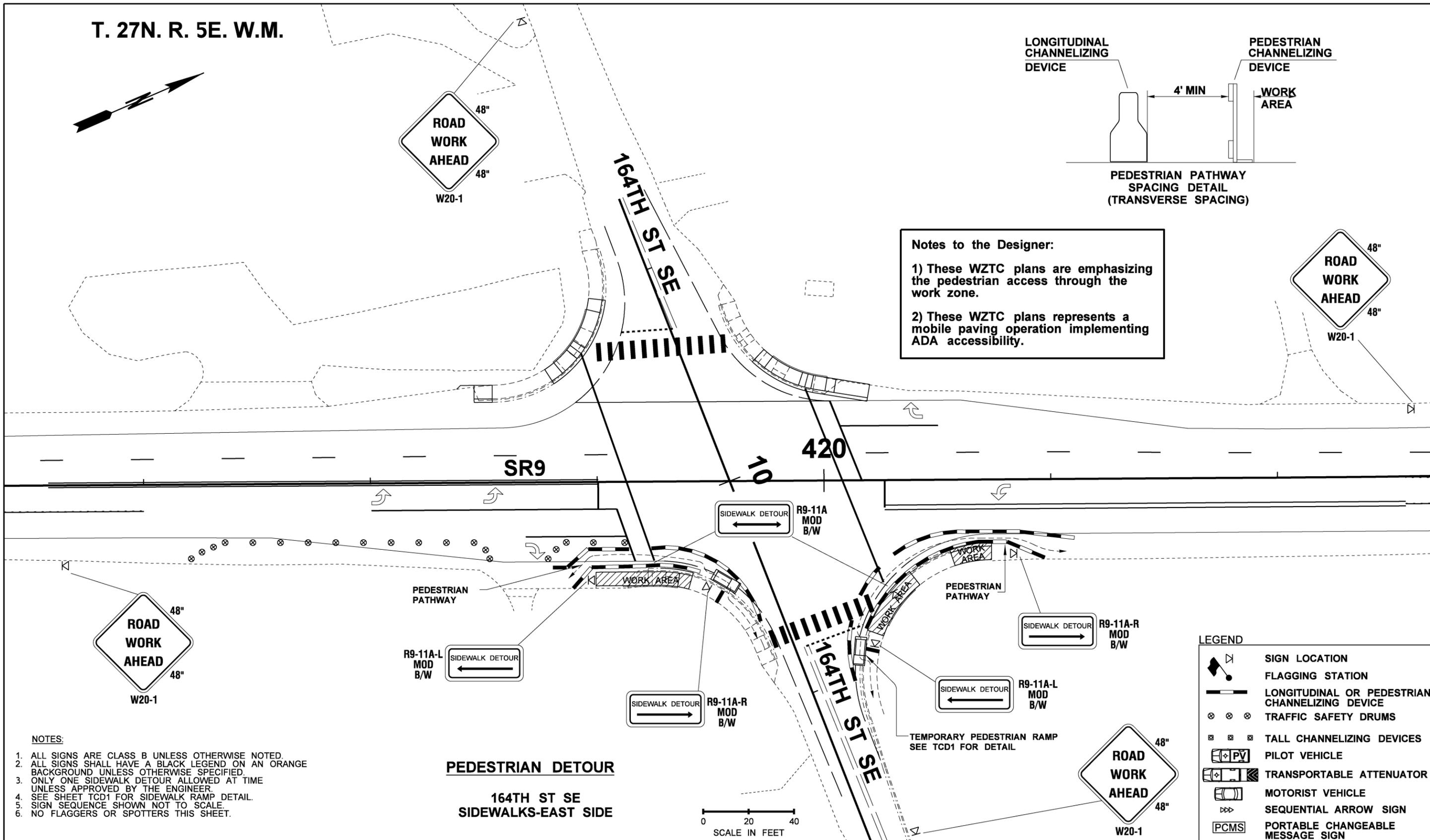
T. 27N. R. 5E. W.M.



Notes to the Designer:

1) These WZTC plans are emphasizing the pedestrian access through the work zone.

2) These WZTC plans represents a mobile paving operation implementing ADA accessibility.



- NOTES:**
1. ALL SIGNS ARE CLASS B UNLESS OTHERWISE NOTED.
 2. ALL SIGNS SHALL HAVE A BLACK LEGEND ON AN ORANGE BACKGROUND UNLESS OTHERWISE SPECIFIED.
 3. ONLY ONE SIDEWALK DETOUR ALLOWED AT TIME UNLESS APPROVED BY THE ENGINEER.
 4. SEE SHEET TCD1 FOR SIDEWALK RAMP DETAIL.
 5. SIGN SEQUENCE SHOWN NOT TO SCALE.
 6. NO FLAGGERS OR SPOTTERS THIS SHEET.

LEGEND

	SIGN LOCATION
	FLAGGING STATION
	LONGITUDINAL OR PEDESTRIAN CHANNELIZING DEVICE
	TRAFFIC SAFETY DRUMS
	TALL CHANNELIZING DEVICES
	PILOT VEHICLE
	TRANSPORTABLE ATTENUATOR
	MOTORIST VEHICLE
	SEQUENTIAL ARROW SIGN
	PORTABLE CHANGEABLE MESSAGE SIGN

FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F021.1_PS_TC.dgn		REGION NO. STATE		FED.AID PROJ.NO.		<p>Washington State Department of Transportation</p>		<p>CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 21.1</p>		PLAN REF NO	
TIME 9:48:26 AM	DATE 10/11/2013	10	WASH							TC1	
PLOTTED BY HIIICI	DESIGNED BY DESIGNER	JOB NUMBER 00Z000		LOCATION NO.		DATE		DATE		SHEET	
ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEAD	CONTRACT NO.		P.E. STAMP BOX		P.E. STAMP BOX		DATE		OF	
PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.	REVISION	DATE	BY	TRAFFIC CONTROL PLAN		SHEETS				

STRIP MAP

The strip map is easy to prepare and is often all that is required for a simple project.

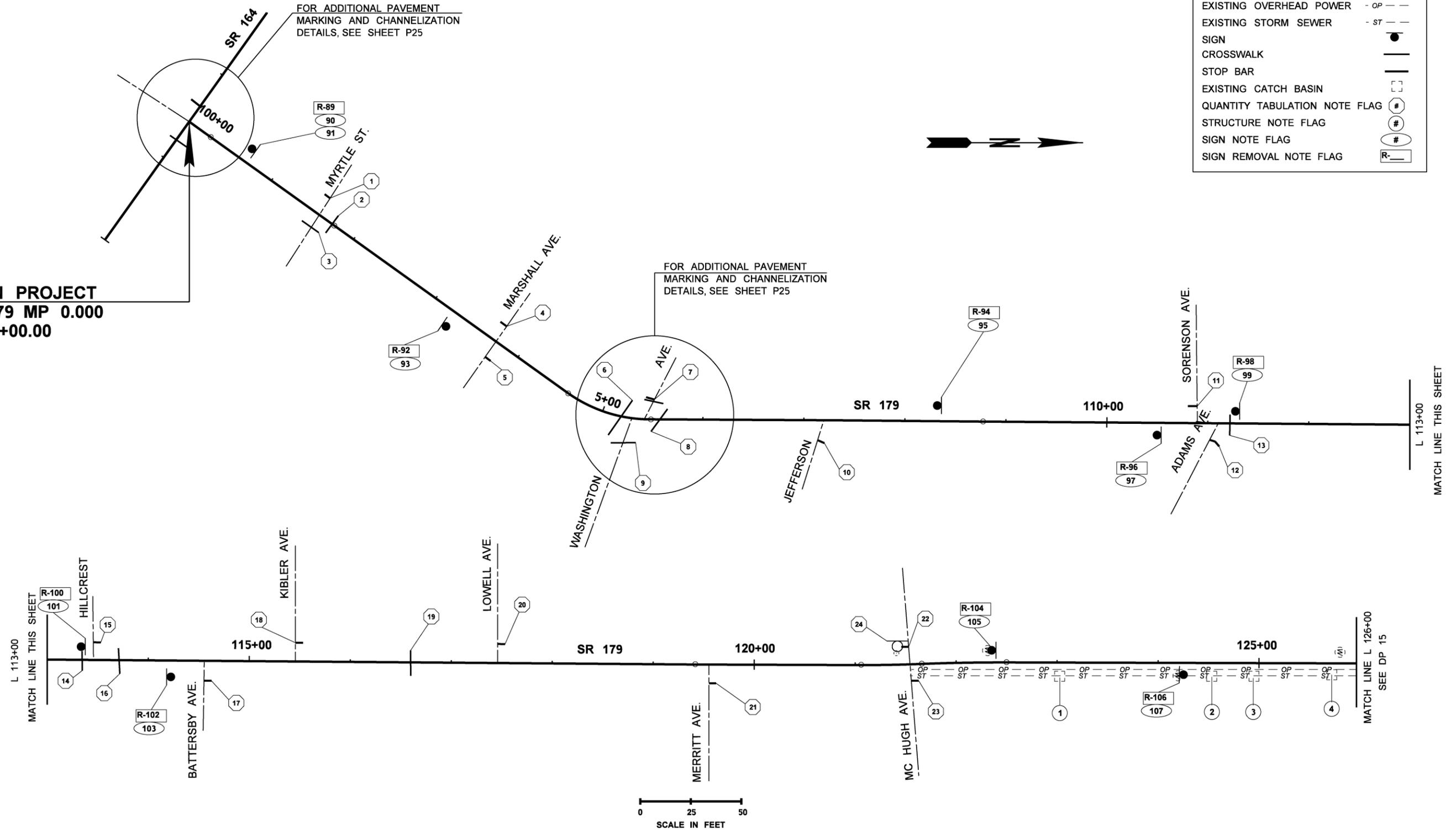
All you need to show is the centerline, with either stationing or milepost reference, and the feature to be constructed. If the roadway curves do not have an impact on the construction of the project - they can be eliminated and the centerline can be drawn straight.

Photographic strip maps can be used, if the photographs are of a quality that will produce an acceptable plan sheet during the reproduction process.

Strip maps may be used in conjunction with more conventional plan sheets if there are sections of the project that do not require a great deal of detail.

LEGEND	
EXISTING MONUMENT	
EXISTING OVERHEAD POWER	- OP - -
EXISTING STORM SEWER	- ST - -
SIGN	
CROSSWALK	
STOP BAR	
EXISTING CATCH BASIN	
QUANTITY TABULATION NOTE FLAG	#
STRUCTURE NOTE FLAG	#
SIGN NOTE FLAG	#
SIGN REMOVAL NOTE FLAG	R-#

BEGIN PROJECT
SR 179 MP 0.000
L 100+00.00



FILE NAME J:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F022_PS_SM.dgn		REGION NO. 10		STATE WASH	FED.AID PROJ.NO. NH-0000(000)	 Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 22 STRIP MAP EXAMPLE	PLAN REF NO. SM1
TIME 9:48:59 AM	DATE 10/11/2013	JOB NUMBER 00Z000		CONTRACT NO.	LOCATION NO. XL-1234			SHEET OF SHEETS
PLOTTED BY HIIICI	DESIGNED BY DESIGNER	REVISION	DATE	BY				
ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEADER							
PROJ. ENGR. PROJECT ENGINEER	REGIONAL ADM. REGIONAL ADM.							

COST ESTIMATE

The estimate is entered into the computer in a program called Estimate & Bid Analysis System (EBASE). The items generated from EBASE include the following:

1. Complete Estimate
2. Proposal
3. Summary of Quantities (in estimate form only. The Ad Copy ready Summary of Quantities is produced with a separate computer program).

NONBID (“below-the-line”) items are those items of work charged to the cost of the project, but the work is not performed by the Contractor. These items include but are not limited to the following:

1. Work performed by State Forces
2. Work performed by Utilities
3. Work performed by Railroads
4. Work performed by Other Agencies
5. Cost of materials
6. Amortization of Pit Sites
7. Royalty Payments

State Force work is limited by law (RCW 47.28.030) to \$60,000 per project. State Force work is defined as work that is normally performed by state forces. Written justification and authorization is required for any work done by state forces with costs included in the project as “below the line”. Questions regarding “below the line” state force work should be directed to the Headquarters Program Management Office.

Agreement work by others such as utility hookups and relocations are itemized by agreement number. Railroad work, including flagging, is itemized per each agreement.

All dollar amounts actually incurred by the Railroad Company for railroad flagging, under the terms of the typical railroad agreement, will be paid by WSDOT. The Contractor will incur no costs for railroad flagging unless the flagging is for the Contractor’s benefit and convenience. In this case, the Project Engineer will deduct this cost on the monthly progress estimates as a “below-the-line” item in the Contract Administration and Payment System.

When estimating contract costs the following items must be taken into consideration:

- Price history
- Work hour restrictions
- Traffic control
- Material availability
- Large/small quantities
- Current market trends
- Unusual specifications for items
- Non-standard use of items
- Interim time for completion
- Workdays
- Liquidated damages

LUMP SUM ITEMS (3-7AA)

For those projects that have lump sum items, a breakdown of each lump sum estimate is required to be included in the PS&E package.

This usually involves attaching the estimate notes from the Project Office.

A lump sum breakdown worksheet is available for each bid item in Ebase. All entries may be printed to a single lump sum breakdown report.

FORCE ACCOUNT ITEMS (3-7R)

Force account items are set up in the estimate when it is difficult to provide adequate measurement or to estimate the cost of certain items of work.

Force account items are costly to administer because of the required records accuracy and the need for WSDOT to provide direct supervision of the contractor's work force performing this item of work.

FOR 3RD PARTY DAMAGE

Reimbursement for *Third Party Damages* is a required bid item for WSDOT projects. Minimum requirements for this bid item are: *Planned Quantity = 5.00 Unit Price = \$1.00*. However each project should be evaluated to accurately determine its needs. Some things to take into consideration when calculating *Planned Quantity for Third Party Damages* on your project are:

- Does the project contain items that are highly susceptible to Third Party Damage?
- What are the project conditions?
- Urban or Rural location?
- High Traffic Exposure?
- Length of contract?

Longer contracts have more exposure to the traveling public. Once the determination of what items are likely to be damaged, enter in the Planned Quantity, a dollar value that represents a reasonable cost of repair/replacement for the item. When assigning the bid item Reimbursement for Third Party Damages, assign it to the largest PIN or the PIN that is most likely to sustain damages. This bid item will be paid for with State Funds only. Do not assign this bid item to a column that is attached to a group with federal funding.

CLASS REPORT

Work Class for a project is determined by which bids items comprise the majority of the work. Multiple work classes may apply if the work is not covered by a single work class, but any 2 or more work classes make up a significant percentage of the work.

PS&E JOB NO: Z009
CONTRACT NO: 000000
WORK ORDER#: XL3832

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
ESTIMATES AND BIDS ANALYSIS SYSTEM
*** PRELIMINARY ESTIMATE - SUMMARY ***

DATE: 10/15/2013 PAGE: 1
TIME: 16:07 VER: 1
DOT_RGG200

HIGHWAY : SR 000, 395
PROJECT TITLE : US 395
NSC - FRANCIS AVENUE IMPROVEMENTS

12Z009

TYPE OF WORK : THIS PROJECT IMPROVES FRANCIS AVENUE AND MARKET STREET BY: REMOVAL ITEMS, BRIDGE DEMOLITION, ROADWAY EXCAVATION, EMBANKMENT, DRAINAGE, BRIDGE CONSTRUCTION, RETAINING WALLS, BARRIER, CURB, CSBC, PCCP, HMA CL 1/2 IN., TEMP & PERMANENT ILLUMINATION SYS., TEMP AND PERMANENT SIGNAL SYS., SIDEWALK, FENCING, PERMANENT SIGNING, PAVEMENT MARKINGS AND OTHER WORK.

FEDERAL AID PROJECT NO : NH-0395(098)
COUNTY(S) : SPOKANE
PROGRAM ITEM NUMBER(S) : 600012A

CONTROL SECTIONS : 3200CT, 3200CY, 321101

ESTIMATED COST DATA :

CONTRACT TOTAL	15,958,992.00
WA SALES TAX: 8.70% OF \$ 10,271,377.00 (GROUPS: 3, 4)	893,609.80
AVISTA UTILITY AGREEMENT	30,000.00
WSP	19,398.15
PROJECT SUBTOTAL	16,901,999.95 **
ENGINEERING 10.00%	1,690,200.00
CONTINGENCIES 4.00%	676,080.00
COMMUNICATION FIBER RELOCATION	428,700.00
BNSF FLAGGERS	296,200.00
UTB1040 CITY HYDRANT RELOCATION	123,300.00

US 395
NSC - FRANCIS AVENUE IMPROVEMENTS
12Z009

CONTRACT PLANS AND ESTIMATE
PREPARATION AND REVIEW COURSE
FIGURE 23

PS&E JOB NO: Z009
CONTRACT NO: 000000
WORK ORDER#: XL3832

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
ESTIMATES AND BIDS ANALYSIS SYSTEM
*** PRELIMINARY ESTIMATE - SUMMARY ***

DATE: 10/15/2013 PAGE: 2
TIME: 16:07 VER: 1
DOT_RGG200

HIGHWAY : SR 000, 395
PROJECT TITLE : US 395
NSC - FRANCIS AVENUE IMPROVEMENTS
12Z009

TYPE OF WORK : THIS PROJECT IMPROVES FRANCIS AVENUE AND MARKET STREET BY: REMOVAL ITEMS, BRIDGE DEMOLITION, ROADWAY EXCAVATION, EMBANKMENT, DRAINAGE, BRIDGE CONSTRUCTION, RETAINING WALLS, BARRIER, CURB, CSBC, PCCP, HMA CL 1/2 IN., TEMP & PERMANENT ILLUMINATION SYS., TEMP AND PERMANENT SIGNAL SYS., SIDEWALK, FENCING, PERMANENT SIGNING, PAVEMENT MARKINGS AND OTHER WORK.

FEDERAL AID PROJECT NO : NH-0395(098)
COUNTY(S) : SPOKANE
PROGRAM ITEM NUMBER(S) : 600012A

CONTROL SECTIONS : 3200CT, 3200CY, 321101

ESTIMATED COST DATA :

STATE SUPPLIED MATERIALS

50,000.00

TOTAL COST OF PROJECT

20,166,479.95 ***

PROJECT REMARKS:

US 395
NSC - FRANCIS AVENUE IMPROVEMENTS
12Z009

CONTRACT PLANS AND ESTIMATE
PREPARATION AND REVIEW COURSE
FIGURE 23.1

PS&E JOB NO: Z009
 CONTRACT NO: 000000
 WORK ORDER NO: XL3832

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 * * * PRELIMINARY ESTIMATE - FUND REPORT * * *

DATE: 10/16/2013 PAGE: 1
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 DOT_RGG500

	Fund 1 CITY OF SPOKANE (1)	Fund 1 FEDERAL NH-0395(098) (2)	Fund 1 STATE (3)	TOTAL
	100.00%	100.00%	100.00%	
BASE	50,372.08	12,334,955.49	3,261,359.43	15,646,687.00
CONTRACT TOTAL				
WASHINGTON STATE SALES TAX 8.70% OF \$10,048,446.00	2,814.40	689,181.08	182,219.32	874,214.80
700 - WSP	62.45	15,292.39	4,043.31	19,398.15
701 - AVISTA UTILITY AGREEMENT	96.58	23,650.29	6,253.13	30,000.00
BASE PROJECT SUBTOTAL	53,345.51	13,063,079.25	3,453,875.19	16,570,299.95
ENGINEERING 10.00%	5,334.55	1,306,307.93	345,387.52	1,657,030.00
CONTINGENCIES 4.00%	2,133.82	522,523.17	138,155.01	662,812.00
801 - BNSF FLAGGERS	953.57	233,507.18	61,739.25	296,200.00
803 - COMMUNICATION FIBER RELOACTION	1,380.13	337,962.63	89,357.24	428,700.00
800 - STATE SUPPLIED MATERIALS	160.97	39,417.15	10,421.88	50,000.00
802 - UTB1040 CITY HYDRANT RELOCATION	396.95	97,202.68	25,700.37	123,300.00

PS&E JOB NO: Z009
CONTRACT NO: 000000
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
ESTIMATES AND BIDS ANALYSIS SYSTEM
* * * PRELIMINARY ESTIMATE - FUND REPORT * * *

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BASE
PROJECT TOTAL

Fund 1 CITY OF SPOKANE	Fund 1 FEDERAL NH-0395(098)	Fund 1 STATE	TOTAL
(1) 100.00%	(2) 100.00%	(3) 100.00%	
<hr/>	<hr/>	<hr/>	<hr/>
63,705.50	15,599,999.99	4,124,636.46	19,788,341.95
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AVISTA, FEDERAL, AND STATE

- (1) SEE GROUPS 1, 2, 3
- (2) SEE GROUPS 1, 2, 3
- (3) SEE GROUPS 1, 2, 3, 4

PS&E JOB NO: Z009
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 * * * PRELIMINARY ESTIMATE - FUND REPORT * * *

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Fund 10			
	STATE		TOTAL
	(1)	100.00%	
BASE			
CONTRACT TOTAL		5.00	5.00
WASHINGTON STATE SALES TAX 8.70%			
OF \$5.00		0.44	0.44
BASE		5.44	5.44
PROJECT SUBTOTAL			
ENGINEERING 10.00%		0.54	0.54
CONTINGENCIES 4.00%		0.22	0.22
BASE		6.20	6.20
PROJECT TOTAL			

STATE

(1) SEE GROUPS 1, 2, 3, 4

PS&E JOB NO: Z009
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY GROUP ***
 GROUP NO : 1

DATE: 10/16/2013 PAGE: 1
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PROGRAM ITEM NUMBER : 600012A
 CONSTR. TYPE CODE :
 PROGRAM CODE : I1
 STATE ROUTE(S) : 000
 COUNTY : SPOKANE
 CONTROL SECTION/SALES TAX : 3200CT / 0.00%
 SAFETY CLASS CODE :

CITY OF SPOKANE JURISDICTION: SOUTH OF MARKET ST. STA MKT 25+28.37 AND SOUTH OF FREYA ST. STA FSC 19+91.13.

FUND NO: 1	PARTICIPANT: CITY OF SPOKANE	PARTICIPATION PERCENT: 100.00%	MAX AMOUNT: 63,705.49
FUND NO: 1	PARTICIPANT: FEDERAL	PARTICIPATION PERCENT: 100.00%	MAX AMOUNT: 15,600,000.00
FUND NO: 1	PARTICIPANT: STATE	PARTICIPATION PERCENT: 100.00%	MAX AMOUNT:

ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT
1	0001	MOBILIZATION	L.S.			511,111.00
2	0025	CLEARING AND GRUBBING	ACRE	1,800.0000	0.20	360.00
3	0049	REMOVING DRAINAGE STRUCTURE	EACH	450.0000	37.00	16,650.00
4	0050	REMOVAL OF STRUCTURE AND OBSTRUCTION	L.S.			13,720.00
7	0100	REMOVING CEMENT CONC. SIDEWALK	S.Y.	30.0000	40.00	1,200.00
8	0150	REMOVING TRAFFIC ISLAND	S.Y.	8.0000	546.00	4,368.00
9	0170	REMOVING GUARDRAIL	L.F.	6.0000	1,640.00	9,840.00
10	0182	REMOVING GUARDRAIL ANCHOR	EACH	150.0000	4.00	600.00
11	0187	REMOVING PAINT LINE	L.F.	0.5000	1,020.00	510.00
12	0203	REMOVING PAINTED CROSSWALK LINE	S.F.	4.0000	1,850.00	7,400.00
13		REMOVING PAINTED STOP LINE	L.F.	1.0000	90.00	90.00
14	0220	REMOVING CHAIN LINK FENCE	L.F.	3.0000	2,440.00	7,320.00
15	0250	REMOVAL AND DISPOSAL OF ASBESTOS MATERIAL	L.S.			10,000.00
16	0310	ROADWAY EXCAVATION INCL. HAUL	C.Y.	8.0000	57,000.00	456,000.00
17	0470	EMBANKMENT COMPACTION	C.Y.	2.5000	20,100.00	50,250.00
18	1160	UNDERDRAIN PIPE 6 IN. DIAM.	L.F.	14.0000	1,020.00	14,280.00
19	3090	CATCH BASIN TYPE 4	EACH	1,200.0000	39.00	46,800.00
20	3091	CATCH BASIN TYPE 1	EACH	1,200.0000	1.00	1,200.00
21	3151	TESTING STORM SEWER PIPE	L.F.	1.5000	3,314.00	4,971.00
22	3541	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	L.F.	20.0000	2,668.00	53,360.00
23	3542	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	L.F.	30.0000	646.00	19,380.00

US 395
 NSC - FRANCIS AVENUE IMPROVEMENTS
 12Z009

CONTRACT PLANS AND ESTIMATE
 PREPARATION AND REVIEW COURSE
 FIGURE 25

PS&E JOB NO: Z009
 CONTRACT NO: 000000
 WORK ORDER#: XL3832

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY GROUP ***
 GROUP NO : 1

DATE: 10/16/2013 PAGE: 2
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ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT
24		POND CONC. PAD	EACH	250.0000	4.00	1,000.00
25		POND OUTFALL	EACH	500.0000	1.00	500.00
26	4006	STRUCTURE EXCAVATION CLASS A INCL. HAUL	C.Y.	16.0000	3,900.00	62,400.00
30	4013	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 3	L.S.			5,000.00
31	4013	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 4	L.S.			1,800.00
32	4013	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 5	L.S.			3,000.00
33		SHORING CL. A - RETAINING WALL 2	L.S.			54,000.00
48	4410	BRIDGE RAILING TYPE WIRE FABRIC FENCE (VERTICAL)	L.F.	150.0000	1,046.00	156,900.00
49	4410	BRIDGE RAILING TYPE SNOW FENCE	L.F.	120.0000	746.00	89,520.00
52	4123	GEOSYNTHETIC RETAINING WALL PEDESTRIAN BARRIER	L.F.	300.0000	300.00	90,000.00
53		GEOSYNTHETIC RETAINING WALL COMBINATION BARRIER	L.F.	480.0000	746.00	358,080.00
54	4474	CONCRETE FASCIA PANEL	S.F.	30.0000	7,400.00	222,000.00
56	5100	CRUSHED SURFACING BASE COURSE	TON	20.0000	12,300.00	246,000.00
57	5334	ANTI-STRIPPING ADDITIVE	EST.			7,020.00
58	5625	CEMENT CONC. PAVEMENT	C.Y.	180.0000	5,950.00	1,071,000.00
59	5637	RIDE SMOOTHNESS COMPLIANCE ADJUSTMENT	CALC			42,840.00
60	5638	PORTLAND CEMENT CONC. COMPLIANCE ADJUSTMENT	CALC			-3.00
61	5680	EPOXY-COATED TIE BAR WITH DRILL HOLE	EACH	10.0000	2,070.00	20,700.00
62	5685	CORROSION RESISTANT DOWEL BAR	EACH	15.0000	8,620.00	129,300.00
63	5767	HMA CL. 1/2 IN. PG 70-28	TON	65.0000	7,020.00	456,300.00
64	5830	JOB MIX COMPLIANCE PRICE ADJUSTMENT	CALC			13,700.00
65	5835	COMPACTION PRICE ADJUSTMENT	CALC			9,130.00
66	5837	ASPHALT COST PRICE ADJUSTMENT	CALC			11,000.00
67	6516	CYCLIC DENSITY PRICE ADJUSTMENT	CALC			-4.00
68	6071	IRRIGATION SYSTEM	L.S.			5,000.00
69	6403	ESC LEAD	DAY	100.0000	130.00	13,000.00
70	6471	INLET PROTECTION	EACH	80.0000	6.00	480.00
71	6468	STABILIZED CONSTRUCTION ENTRANCE	S.Y.	1.0000	400.00	400.00
72	6469	TIRE WASH	EACH	12,000.0000	2.00	24,000.00

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 NSC - FRANCIS AVENUE IMPROVEMENTS
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CONTRACT PLANS AND ESTIMATE
 PREPARATION AND REVIEW COURSE
 FIGURE 25.1

PS&E JOB NO: Z009
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
ESTIMATES AND BIDS ANALYSIS SYSTEM
*** PRELIMINARY ESTIMATE - BY GROUP ***
GROUP NO : 1

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ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT
73	6373	SILT FENCE	L.F.	5.0000	930.00	4,650.00
74	6490	EROSION/WATER POLLUTION CONTROL	EST.			2,000.00
75	6472	TEMPORARY CURB	L.F.	5.0000	1,340.00	6,700.00
76	7315	TEMPORARY PIPE SLOPE DRAIN	L.F.	30.0000	180.00	5,400.00
77	6445	TACKIFIER	ACRE	350.0000	4.20	1,470.00
78	6422	SEEDING AND MULCHING	ACRE	2,500.0000	4.20	10,500.00
79	6410	TOPSOIL TYPE B	C.Y.	12.0000	640.00	7,680.00
80	6700	CEMENT CONC. TRAFFIC CURB AND GUTTER	L.F.	25.0000	3,755.00	93,875.00
81	6701	CEMENT CONC. TRAFFIC CURB	L.F.	20.0000	170.00	3,400.00
82		CONCRETE CURB WALL	L.F.	30.0000	115.00	3,450.00
83		CEMENT CONC. TRAFFIC ISLAND CURB TYPE 1	L.F.	16.0000	1,370.00	21,920.00
84		CEMENT CONC. TRAFFIC ISLAND CURB TYPE 2	L.F.	16.0000	1,445.00	23,120.00
85		TRAFFIC ISLAND	S.Y.	30.0000	675.00	20,250.00
86		ISLAND CHANNELIZATION DEVICE	EACH	60.0000	14.00	840.00
87	6781	TEMPORARY CONC. BARRIER	L.F.	20.0000	250.00	5,000.00
88	7440	TEMPORARY IMPACT ATTENUATOR	EACH	2,500.0000	2.00	5,000.00
89	6807	PLASTIC LINE	L.F.	2.0000	12,260.00	24,520.00
90	6818	PLASTIC WIDE LINE	L.F.	5.0000	2,110.00	10,550.00
91		PLASTIC CROSSWALK LINE	L.F.	5.0000	1,320.00	6,600.00
92	6858	PAINTED STOP LINE	L.F.	4.0000	180.00	720.00
93	6859	PLASTIC STOP LINE	L.F.	11.0000	280.00	3,080.00
94	6860	PAINTED TRAFFIC ARROW	EACH	60.0000	6.00	360.00
95	6833	PLASTIC TRAFFIC ARROW	EACH	250.0000	4.00	1,000.00
96	6878	PAINTED RAILROAD CROSSING SYMBOL	EACH	300.0000	3.00	900.00
97	6867	PLASTIC BICYCLE LANE SYMBOL	EACH	250.0000	6.00	1,500.00
98	6888	TEMPORARY PAVEMENT MARKING	L.F.	0.2000	7,250.00	1,450.00
99	6890	PERMANENT SIGNING	L.S.			39,900.00
100	6903	TEMPORARY ILLUMINATION SYSTEM	L.S.			15,000.00
101	6904	ILLUMINATION SYSTEM	L.S.			55,000.00
102		SIGNAL/ELECTRICAL SYSTEM REMOVAL	L.S.			20,000.00
103		TEMPORARY TRAFFIC SIGNAL SYSTEM 1	L.S.			76,000.00

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NSC - FRANCIS AVENUE IMPROVEMENTS
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CONTRACT PLANS AND ESTIMATE
PREPARATION AND REVIEW COURSE
FIGURE 25.2

PS&E JOB NO: Z009
 CONTRACT NO: 000000
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY GROUP ***
 GROUP NO : 1

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ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT
104		TEMPORARY TRAFFIC SIGNAL SYSTEM 2	L.S.			76,000.00
105	6912	TRAFFIC SIGNAL SYSTEM 1	L.S.			110,000.00
106	6912	TRAFFIC SIGNAL SYSTEM 2	L.S.			67,000.00
107		COMMUNICATION CONDUIT SYSTEM	L.S.			19,800.00
111	6956	SEQUENTIAL ARROW SIGN	HR	3.0000	2,000.00	6,000.00
112	6993	PORTABLE CHANGEABLE MESSAGE SIGN	HR	5.0000	3,000.00	15,000.00
113	6973	OTHER TEMPORARY TRAFFIC CONTROL	L.S.			10,000.00
114	6980	FLAGGERS AND SPOTTERS	HR	45.0000	500.00	22,500.00
115	6992	OTHER TRAFFIC CONTROL LABOR	HR	45.0000	200.00	9,000.00
116	6974	TRAFFIC CONTROL SUPERVISOR	L.S.			50,000.00
117	6982	CONSTRUCTION SIGNS CLASS A	S.F.	20.0000	220.00	4,400.00
118	7003	TYPE B PROGRESS SCHEDULE	L.S.			15,000.00
119	7006	STRUCTURE EXCAVATION CLASS B INCL. HAUL	C.Y.	5.0000	4,040.00	20,200.00
120	7008	SHORING OR EXTRA EXCAVATION CLASS B	S.F.	1.0000	26,080.00	26,080.00
121	7014	GRAVEL BACKFILL FOR DRAIN	C.Y.	30.0000	38.00	1,140.00
122	7055	CEMENT CONC. SIDEWALK	S.Y.	40.0000	1,750.00	70,000.00
123	7059	CEMENT CONC. DRIVEWAY ENTRANCE TYPE COS	S.Y.	40.0000	525.00	21,000.00
124	7058	CEMENT CONC. CURB RAMP TYPE 1	EACH	1,200.0000	1.00	1,200.00
125	7058	CEMENT CONC. CURB RAMP TYPE 2	EACH	1,200.0000	15.00	18,000.00
126	7058	CEMENT CONC. CURB RAMP TYPE 3	EACH	1,200.0000	2.00	2,400.00
127	7054	DETECTABLE WARNING SURFACE	S.F.	45.0000	4.00	180.00
128	7085	COATED CHAIN LINK FENCE TYPE 3	L.F.	22.0000	545.00	11,990.00
129	7098	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	EACH	220.0000	23.00	5,060.00
130	7106	DOUBLE 20 FT. COATED CHAIN LINK GATE	EACH	1,500.0000	2.00	3,000.00
131	7166	ROCK FOR ROCK WALL	TON	100.0000	325.00	32,500.00
132	7167	BACKFILL FOR ROCK WALL	TON	20.0000	240.00	4,800.00
133	9602	ADJUST INLET	EACH	400.0000	1.00	400.00
134	9605	CONNECTION TO DRAINAGE STRUCTURE	EACH	400.0000	2.00	800.00
135	3080	ADJUST MANHOLE	EACH	600.0000	3.00	1,800.00
136	7360	MANHOLE 48 IN. DIAM. TYPE 1	EACH	3,300.0000	9.00	29,700.00
137		ADJUST DRYWELL	EACH	500.0000	1.00	500.00

US 395
 NSC - FRANCIS AVENUE IMPROVEMENTS
 12Z009

CONTRACT PLANS AND ESTIMATE
 PREPARATION AND REVIEW COURSE
 FIGURE 25.3

PS&E JOB NO: Z009
 CONTRACT NO: 000000
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY GROUP ***
 GROUP NO : 1

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ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT
138	7350	CLEANING EXISTING DRAINAGE STRUCTURE	L.S.			50.00
140	7480	ROADSIDE CLEANUP	EST.			10,000.00
142	7728	MINOR CHANGE	CALC			-1.00
143	7730	FUEL COST ADJUSTMENT	CALC			26,160.00
145	7732	AGGREGATE COMPLIANCE PRICE ADJUSTMENT	CALC			-1.00
146	7736	SPCC PLAN	L.S.			1,500.00
148	7559	GEOSYNTHETIC RETAINING WALL	S.F.	12.0000	8,130.00	97,560.00
149	7567	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	C.Y.	20.0000	4,660.00	93,200.00
GROUP 1 BASE SUBTOTAL :						5,679,226.00 *
AVISTA UTILITY AGREEMENT						30,000.00
WSP						19,398.15
GROUP 1 SUBTOTAL						5,728,624.15 **
ENGINEERING 10.00%						572,862.42
COMMUNICATION FIBER RELOACTION						428,700.00
BNSF FLAGGERS						296,200.00
UTB1040 CITY HYDRANT RELOCATION						123,300.00
STATE SUPPLIED MATERIALS						50,000.00
GROUP 1 TOTAL						7,199,686.57 ***

PS&E JOB NO: Z009
 CONTRACT NO: 000000
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY GROUP ***
 GROUP NO : 4

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PROGRAM ITEM NUMBER : 600012A
 CONSTR. TYPE CODE :
 PROGRAM CODE : I1
 STATE ROUTE(S) : 395
 COUNTY : SPOKANE
 CONTROL SECTION/SALES TAX : 321101 /8.70%
 SAFETY CLASS CODE :
 FUND NO: 10 PARTICIPANT: STATE

THIRD PARTY DAMAGES

PARTICIPATION PERCENT: 100.00% MAX AMOUNT:

ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT
141	7725	REIMBURSEMENT FOR THIRD PARTY DAMAGE	EST.			5.00
GROUP 4 BASE SUBTOTAL :						5.00 *
WASHINGTON STATE SALES TAX 8.70% OF \$ 5.00						0.44
GROUP 4 SUBTOTAL						5.44 **
ENGINEERING 10.00%						0.54
GROUP 4 TOTAL						5.98 ***

PS&E JOB NO: Z009
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY ITEM ***

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ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT	PRE-QUAL
PREPARATION							
1	0001	MOBILIZATION	L.S.			1,436,255.00	A1
2	0025	CLEARING AND GRUBBING	ACRE	1,800.00	0.20	360.00	D6
3	0049	REMOVING DRAINAGE STRUCTURE	EACH	450.00	37.00	16,650.00	G2
4	0050	REMOVAL OF STRUCTURE AND OBSTRUCTION	L.S.			13,720.00	F8
5	0256	REMOVING SHAFT OBSTRUCTIONS	EST.			200,000.00	T0
6	0071	REMOVING EXISTING BRIDGE NO. 480000852	L.S.			200,000.00	F8
7	0100	REMOVING CEMENT CONC. SIDEWALK	S.Y.	30.00	40.00	1,200.00	D6
8	0150	REMOVING TRAFFIC ISLAND	S.Y.	8.00	546.00	4,368.00	D6
9	0170	REMOVING GUARDRAIL	L.F.	6.00	1,640.00	9,840.00	K2
10	0182	REMOVING GUARDRAIL ANCHOR	EACH	150.00	4.00	600.00	K2
11	0187	REMOVING PAINT LINE	L.F.	0.50	1,020.00	510.00	Q2
12	0203	REMOVING PAINTED CROSSWALK LINE	S.F.	4.00	1,850.00	7,400.00	Q2
13		REMOVING PAINTED STOP LINE	L.F.	1.00	90.00	90.00	Q2
14	0220	REMOVING CHAIN LINK FENCE	L.F.	3.00	2,440.00	7,320.00	I8
15	0250	REMOVAL AND DISPOSAL OF ASBESTOS MATERIAL	L.S.			10,000.00	A3
GRADING							
16	0310	ROADWAY EXCAVATION INCL. HAUL	C.Y.	8.00	57,400.00	459,200.00	J6
17	0470	EMBANKMENT COMPACTION	C.Y.	2.50	20,500.00	51,250.00	J6
DRAINAGE							
18	1160	UNDERDRAIN PIPE 6 IN. DIAM.	L.F.	14.00	1,220.00	17,080.00	L4
STORM SEWER							
19	3090	CATCH BASIN TYPE 4	EACH	1,200.00	39.00	46,800.00	T8
20	3091	CATCH BASIN TYPE 1	EACH	1,200.00	1.00	1,200.00	T8
21	3151	TESTING STORM SEWER PIPE	L.F.	1.50	3,314.00	4,971.00	T8
22	3541	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	L.F.	20.00	2,668.00	53,360.00	T8
23	3542	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	L.F.	30.00	646.00	19,380.00	T8
24		POND CONC. PAD	EACH	250.00	4.00	1,000.00	E8
25		POND OUTFALL	EACH	500.00	1.00	500.00	E8

PS&E JOB NO: Z009
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 WORK ORDER : XL3832

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY ITEM ***

DATE: 10/16/2013 PAGE: 2
 TIME: 08:31 VER: 1
 DOT-RGG100

ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT	PRE-QUAL
STRUCTURE							
26	4006	STRUCTURE EXCAVATION CLASS A INCL. HAUL	C.Y.	16.00	10,900.00	174,400.00	I2
27	4007	SOIL EXCAVATION FOR SHAFT INCLUDING HAUL	C.Y.	300.00	1,830.00	549,000.00	T0
28	4013	SHORING OR EXTRA EXCAVATION CL. A - FRANCIS AVE BR	L.S.			200,000.00	I2
29	4013	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 1	L.S.			60,000.00	I2
30	4013	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 3	L.S.			5,000.00	I2
31	4013	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 4	L.S.			1,800.00	I2
32	4013	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 5	L.S.			3,000.00	I2
33		SHORING CL. A - RETAINING WALL 2	L.S.			54,000.00	I2
34	4020	FURNISHING & PLACING TEMP. CASING FOR 8'-0" DIA. SHAFT	L.F.	500.00	517.00	258,500.00	T0
35	4027	FURNISHING PERMANENT CASING FOR 8'-0" DIAM. SHAFT	L.F.	800.00	130.00	104,000.00	T0
36	4034	PLACING PERMANENT CASING FOR 8'-0" DIAM. SHAFT	EACH	8,000.00	13.00	104,000.00	T0
37	4039	CASING SHORING	L.F.	500.00	336.00	168,000.00	T0
38	4149	ST. REINF. BAR FOR BRIDGE	LB.	0.90	331,100.00	297,990.00	U0
39	4152	ST. REINF. BAR FOR SHAFT	LB.	0.90	325,000.00	292,500.00	U0
40	4164	CSL ACCESS TUBE	L.F.	7.00	5,180.00	36,260.00	U0
41	4322	CONC. CLASS 4000 FOR BRIDGE	C.Y.	425.00	1,810.00	769,250.00	B0
42	4168	CONC. CLASS 4000P FOR SHAFT	C.Y.	200.00	1,210.00	242,000.00	B0
43	4269	PRESTRESSED CONC. GIRDER W53DG	L.F.	300.00	3,210.00	963,000.00	R8
44	4269	PRESTRESSED CONC. GIRDER W41DG	L.F.	275.00	7,500.00	2,062,500.00	R8
45	4219	DEFICIENT STRENGTH CONC. PRICE ADJUSTMENT	CALC			-1.00	B0
46	4300	SUPERSTRUCTURE - FRANCIS AVE OVER US 395 & BNSF BRIDGE	L.S.			1,700,000.00	B0
47	4410	BRIDGE RAILING TYPE WIRE FABRIC FENCE (CURVED)	L.F.	225.00	1,010.00	227,250.00	B0
48	4410	BRIDGE RAILING TYPE WIRE FABRIC FENCE (VERTICAL)	L.F.	150.00	1,046.00	156,900.00	B0
49	4410	BRIDGE RAILING TYPE SNOW FENCE	L.F.	120.00	1,756.00	210,720.00	B0
50	4114	TRAFFIC PEDESTRIAN BARRIER	L.F.	160.00	1,010.00	161,600.00	D0
51	4117	PEDESTRIAN BARRIER	L.F.	120.00	1,010.00	121,200.00	D0
52	4123	GEOSYNTHETIC RETAINING WALL PEDESTRIAN BARRIER	L.F.	300.00	300.00	90,000.00	D0

PS&E JOB NO: Z009
 CONTRACT NO: 000000
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY ITEM ***

DATE: 10/16/2013 PAGE: 3
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ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT	PRE-QUAL
STRUCTURE							
53		GEOSYNTHETIC RETAINING WALL COMBINATION BARRIER	L.F.	480.00	746.00	358,080.00	D0
54	4474	CONCRETE FASCIA PANEL	S.F.	30.00	9,370.00	281,100.00	B0
55	5656	BRIDGE APPROACH SLAB	S.Y.	220.00	578.00	127,160.00	B0
SURFACING							
56	5100	CRUSHED SURFACING BASE COURSE	TON	20.00	12,450.00	249,000.00	F6
LIQUID ASPHALT							
57	5334	ANTI-STRIPPING ADDITIVE	EST.			7,020.00	A4
CEMENT CONCRETE PAVEMENT							
58	5625	CEMENT CONC. PAVEMENT	C.Y.	180.00	5,950.00	1,071,000.00	C0
59	5637	RIDE SMOOTHNESS COMPLIANCE ADJUSTMENT	CALC			42,840.00	C0
60	5638	PORTLAND CEMENT CONC. COMPLIANCE ADJUSTMENT	CALC			-3.00	C0
61	5680	EPOXY-COATED TIE BAR WITH DRILL HOLE	EACH	10.00	2,070.00	20,700.00	C0
62	5685	CORROSION RESISTANT DOWEL BAR	EACH	15.00	8,620.00	129,300.00	C0
HOT MIX ASPHALT							
63	5767	HMA CL. 1/2 IN. PG 70-28	TON	65.00	7,020.00	456,300.00	A4
64	5830	JOB MIX COMPLIANCE PRICE ADJUSTMENT	CALC			13,700.00	A4
65	5835	COMPACTION PRICE ADJUSTMENT	CALC			9,130.00	A4
66	5837	ASPHALT COST PRICE ADJUSTMENT	CALC			11,000.00	A4
67	6516	CYCLIC DENSITY PRICE ADJUSTMENT	CALC			-4.00	A4
IRRIGATION AND WATER DISTRIBUTION							
68	6071	IRRIGATION SYSTEM	L.S.			5,000.00	M4
EROSION CNTL AND ROADSIDE RESTORATION							
69	6403	ESC LEAD	DAY	100.00	130.00	13,000.00	H0
70	6471	INLET PROTECTION	EACH	80.00	6.00	480.00	H0
71	6468	STABILIZED CONSTRUCTION ENTRANCE	S.Y.	1.00	400.00	400.00	H0
72	6469	TIRE WASH	EACH	12,000.00	2.00	24,000.00	H0
73	6373	SILT FENCE	L.F.	5.00	930.00	4,650.00	H0
74	6490	EROSION/WATER POLLUTION CONTROL	EST.			2,000.00	H0

PS&E JOB NO: Z009
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WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY ITEM ***

DATE: 10/16/2013 PAGE: 4
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 DOT-RGG100

ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT	PRE-QUAL
EROSION CNTL AND ROADSIDE RESTORATION							
75	6472	TEMPORARY CURB	L.F.	5.00	1,340.00	6,700.00	H0
76	7315	TEMPORARY PIPE SLOPE DRAIN	L.F.	30.00	180.00	5,400.00	G2
77	6445	TACKIFIER	ACRE	350.00	4.30	1,505.00	H0
78	6422	SEEDING AND MULCHING	ACRE	2,500.00	4.30	10,750.00	T2
79	6410	TOPSOIL TYPE B	C.Y.	12.00	640.00	7,680.00	H0
TRAFFIC							
80	6700	CEMENT CONC. TRAFFIC CURB AND GUTTER	L.F.	25.00	3,755.00	93,875.00	C8
81	6701	CEMENT CONC. TRAFFIC CURB	L.F.	20.00	170.00	3,400.00	C8
82		CONCRETE CURB WALL	L.F.	30.00	115.00	3,450.00	C8
83		CEMENT CONC. TRAFFIC ISLAND CURB TYPE 1	L.F.	16.00	1,370.00	21,920.00	C8
84		CEMENT CONC. TRAFFIC ISLAND CURB TYPE 2	L.F.	16.00	1,445.00	23,120.00	C8
85		TRAFFIC ISLAND	S.Y.	30.00	675.00	20,250.00	C8
86		ISLAND CHANNELIZATION DEVICE	EACH	60.00	14.00	840.00	N2
87	6781	TEMPORARY CONC. BARRIER	L.F.	20.00	250.00	5,000.00	N0
88	7440	TEMPORARY IMPACT ATTENUATOR	EACH	2,500.00	2.00	5,000.00	L6
89	6807	PLASTIC LINE	L.F.	2.00	12,260.00	24,520.00	V6
90	6818	PLASTIC WIDE LINE	L.F.	5.00	2,110.00	10,550.00	V6
91		PLASTIC CROSSWALK LINE	L.F.	5.00	1,320.00	6,600.00	P6
92	6858	PAINTED STOP LINE	L.F.	4.00	180.00	720.00	P6
93	6859	PLASTIC STOP LINE	L.F.	11.00	280.00	3,080.00	V6
94	6860	PAINTED TRAFFIC ARROW	EACH	60.00	6.00	360.00	P0
95	6833	PLASTIC TRAFFIC ARROW	EACH	250.00	4.00	1,000.00	V6
96	6878	PAINTED RAILROAD CROSSING SYMBOL	EACH	300.00	3.00	900.00	P0
97	6867	PLASTIC BICYCLE LANE SYMBOL	EACH	250.00	6.00	1,500.00	V6
98	6888	TEMPORARY PAVEMENT MARKING	L.F.	0.20	7,250.00	1,450.00	N2
99	6890	PERMANENT SIGNING	L.S.			39,900.00	U4
100	6903	TEMPORARY ILLUMINATION SYSTEM	L.S.			15,000.00	H2
101	6904	ILLUMINATION SYSTEM	L.S.			55,000.00	H2

US 395
 NSC - FRANCIS AVENUE IMPROVEMENTS

CONTRACT PLANS AND ESTIMATE
 PREPARATION AND REVIEW COURSE
 FIGURE 26.3

PS&E JOB NO: Z009
 CONTRACT NO: 000000
 WORK ORDER : XL3832

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY ITEM ***

DATE: 10/16/2013 PAGE: 5
 TIME: 08:31 VER: 1
 DOT-RGG100

ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT	PRE-QUAL
TRAFFIC							
102		SIGNAL/ELECTRICAL SYSTEM REMOVAL	L.S.			20,000.00	W6
103		TEMPORARY TRAFFIC SIGNAL SYSTEM 1	L.S.			76,000.00	W6
104		TEMPORARY TRAFFIC SIGNAL SYSTEM 2	L.S.			76,000.00	W6
105	6912	TRAFFIC SIGNAL SYSTEM 1	L.S.			110,000.00	W6
106	6912	TRAFFIC SIGNAL SYSTEM 2	L.S.			67,000.00	W6
107		COMMUNICATION CONDUIT SYSTEM	L.S.			19,800.00	W6
108	6949	CONDUIT PIPE 4 IN. DIAM.	L.F.	40.00	525.00	21,000.00	B0
109		CONDUIT PIPE 10 IN. DIAM.	L.F.	120.00	525.00	63,000.00	B0
110		CONDUIT SYSTEM	L.F.	25.00	505.00	12,625.00	B0
111	6956	SEQUENTIAL ARROW SIGN	HR	3.00	2,000.00	6,000.00	W3
112	6993	PORTABLE CHANGEABLE MESSAGE SIGN	HR	5.00	3,000.00	15,000.00	W3
113	6973	OTHER TEMPORARY TRAFFIC CONTROL	L.S.			10,000.00	W3
114	6980	FLAGGERS AND SPOTTERS	HR	45.00	500.00	22,500.00	W3
115	6992	OTHER TRAFFIC CONTROL LABOR	HR	45.00	200.00	9,000.00	W3
116	6974	TRAFFIC CONTROL SUPERVISOR	L.S.			50,000.00	W3
117	6982	CONSTRUCTION SIGNS CLASS A	S.F.	20.00	220.00	4,400.00	W3
OTHER ITEMS							
118	7003	TYPE B PROGRESS SCHEDULE	L.S.			15,000.00	A1
119	7006	STRUCTURE EXCAVATION CLASS B INCL. HAUL	C.Y.	5.00	4,040.00	20,200.00	I2
120	7008	SHORING OR EXTRA EXCAVATION CLASS B	S.F.	1.00	26,080.00	26,080.00	I2
121	7014	GRAVEL BACKFILL FOR DRAIN	C.Y.	30.00	46.00	1,380.00	F6
122	7055	CEMENT CONC. SIDEWALK	S.Y.	40.00	1,750.00	70,000.00	C8
123	7059	CEMENT CONC. DRIVEWAY ENTRANCE TYPE COS	S.Y.	40.00	525.00	21,000.00	C8
124	7058	CEMENT CONC. CURB RAMP TYPE 1	EACH	1,200.00	1.00	1,200.00	C8
125	7058	CEMENT CONC. CURB RAMP TYPE 2	EACH	1,200.00	15.00	18,000.00	C8
126	7058	CEMENT CONC. CURB RAMP TYPE 3	EACH	1,200.00	2.00	2,400.00	C8
127	7054	DETECTABLE WARNING SURFACE	S.F.	45.00	4.00	180.00	C8
128	7085	COATED CHAIN LINK FENCE TYPE 3	L.F.	22.00	545.00	11,990.00	I6

US 395
 NSC - FRANCIS AVENUE IMPROVEMENTS

CONTRACT PLANS AND ESTIMATE
 PREPARATION AND REVIEW COURSE
 FIGURE 26.5

PS&E JOB NO: Z009
 CONTRACT NO: 000000
 WORK ORDER : XL3832

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 ESTIMATES AND BIDS ANALYSIS SYSTEM
 *** PRELIMINARY ESTIMATE - BY ITEM ***

DATE: 10/16/2013 PAGE: 6
 TIME: 08:31 VER: 1
 DOT-RGG100

ITEM NO.	STD. NO.	ITEM DESCRIPTION	UNIT MEAS	UNIT PRICE	QUANTITY	AMOUNT	PRE-QUAL
OTHER ITEMS							
129	7098	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	EACH	220.00	23.00	5,060.00	I6
130	7106	DOUBLE 20 FT. COATED CHAIN LINK GATE	EACH	1,500.00	2.00	3,000.00	I6
131	7166	ROCK FOR ROCK WALL	TON	100.00	325.00	32,500.00	S4
132	7167	BACKFILL FOR ROCK WALL	TON	20.00	240.00	4,800.00	S4
133	9602	ADJUST INLET	EACH	400.00	1.00	400.00	G2
134	9605	CONNECTION TO DRAINAGE STRUCTURE	EACH	400.00	2.00	800.00	T8
135	3080	ADJUST MANHOLE	EACH	600.00	3.00	1,800.00	T8
136	7360	MANHOLE 48 IN. DIAM. TYPE 1	EACH	3,300.00	9.00	29,700.00	T8
137		ADJUST DRYWELL	EACH	500.00	1.00	500.00	I2
138	7350	CLEANING EXISTING DRAINAGE STRUCTURE	L.S.			50.00	A1
139	7400	TRAINING	HR	1.00	1,600.00	1,600.00	A1
140	7480	ROADSIDE CLEANUP	EST.			10,000.00	A1
141	7725	REIMBURSEMENT FOR THIRD PARTY DAMAGE	EST.			5.00	A1
142	7728	MINOR CHANGE	CALC			-2.00	A1
143	7730	FUEL COST ADJUSTMENT	CALC			67,960.00	A1
144	7731	STEEL COST ADJUSTMENT	CALC			5,000.00	A1
145	7732	AGGREGATE COMPLIANCE PRICE ADJUSTMENT	CALC			-2.00	A1
146	7736	SPCC PLAN	L.S.			1,500.00	A1
147	7500	FIELD OFFICE BUILDING	L.S.			20,000.00	A1
148	7559	GEOSYNTHETIC RETAINING WALL	S.F.	12.00	9,910.00	118,920.00	G2
149	7567	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL	C.Y.	20.00	5,720.00	114,400.00	I2
BASE TOTAL :						15,958,992.00	

P R O P O S A L

TO THE SECRETARY OF
TRANSPORTATION
OLYMPIA, WASHINGTON

DATE: 05/09/2012
TIME: 15:15
DOT_RGG600

THIS CERTIFIES THAT THE UNDERSIGNED HAS EXAMINED THE LOCATION OF

US 395; NSC - FRANCIS AVENUE IMPROVEMENTS; IN SPOKANE COUNTY AND THE CITY OF SPOKANE,
THIS IS A FEDERAL AID PROJECT,

AND THAT THE PLANS, SPECIFICATIONS AND CONTRACT GOVERNING THE WORK EMBRACED IN THIS IMPROVEMENT, AND THE METHOD BY WHICH PAYMENT WILL BE MADE FOR SAID WORK IS UNDERSTOOD. THE UNDERSIGNED HEREBY PROPOSES TO UNDERTAKE AND COMPLETE THE WORK EMBRACED IN THIS IMPROVEMENT, OR AS MUCH THEREOF AS CAN BE COMPLETED WITH THE MONEY AVAILABLE IN ACCORDANCE WITH THE SAID PLANS, SPECIFICATIONS AND CONTRACT, AND THE FOLLOWING SCHEDULE OF RATES AND PRICES:

(NOTE: UNIT PRICES FOR ALL ITEMS, ALL EXTENSIONS, AND TOTAL AMOUNT OF BID SHALL BE SHOWN. ALL ENTRIES MUST BE TYPED OR ENTERED IN INK.)

ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
PREPARATION				
1	LUMP SUM	MOBILIZATION (0001)	LUMP SUM	•
2	0.2 ACRE	CLEARING AND GRUBBING (0025)	AT PER ACRE	•
3	37. EACH	REMOVING DRAINAGE STRUCTURE (0049)	AT PER EACH	•
4	LUMP SUM	REMOVAL OF STRUCTURE AND OBSTRUCTION (0050)	LUMP SUM	•
5	ESTIMATED	REMOVING SHAFT OBSTRUCTIONS (0256)	ESTIMATED	200,000.00
6	LUMP SUM	REMOVING EXISTING BRIDGE NO. 480000852 (0071)	LUMP SUM	•
7	40. SQ. YD.	REMOVING CEMENT CONC. SIDEWALK (0100)	AT PER SQ. YD.	•
8	546. SQ. YD.	REMOVING TRAFFIC ISLAND (0150)	AT PER SQ. YD.	•
9	1,640. LIN. FT.	REMOVING GUARDRAIL (0170)	AT PER LIN. FT.	•

* - SHOW PRICE PER UNIT IN FIGURES ONLY. FIGURES WRITTEN TO THE RIGHT OF THE DOT (DECIMAL) IN THE PRICE PER UNIT COLUMN SHALL BE INTERPRETED AS CENTS.

ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
PREPARATION				
10	4. EACH	REMOVING GUARDRAIL ANCHOR (0182)	AT PER EACH	
11	1,020. LIN. FT.	REMOVING PAINT LINE (0187)	AT PER LIN. FT.	
12	1,850. SQ. FT.	REMOVING PAINTED CROSSWALK LINE (0203)	AT PER SQ. FT.	
13	90. LIN. FT.	REMOVING PAINTED STOP LINE ()	AT PER LIN. FT.	
14	2,440. LIN. FT.	REMOVING CHAIN LINK FENCE (0220)	AT PER LIN. FT.	
15	LUMP SUM	REMOVAL AND DISPOSAL OF ASBESTOS MATERIAL (0250)	LUMP SUM	
GRADING				
16	57,400. CU. YD.	ROADWAY EXCAVATION INCL. HAUL (0310)	AT PER CU. YD.	
17	20,500. CU. YD.	EMBANKMENT COMPACTION (0470)	AT PER CU. YD.	
DRAINAGE				
18	1,220. LIN. FT.	UNDERDRAIN PIPE 6 IN. DIAM. (1160)	AT PER LIN. FT.	
STORM SEWER				
19	39. EACH	CATCH BASIN TYPE 4 (3090)	AT PER EACH	
20	1. EACH	CATCH BASIN TYPE 1 (3091)	AT PER EACH	
21	3,314. LIN. FT.	TESTING STORM SEWER PIPE (3151)	AT PER LIN. FT.	

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ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
STORM SEWER				
22	2,668. LIN. FT.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM. (3541)	AT PER LIN. FT.	
23	646. LIN. FT.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM. (3542)	AT PER LIN. FT.	
24	4. EACH	POND CONC. PAD ()	AT PER EACH	
25	1. EACH	POND OUTFALL ()	AT PER EACH	
STRUCTURE				
26	10,900. CU. YD.	STRUCTURE EXCAVATION CLASS A INCL. HAUL (4006)	AT PER CU. YD.	
27	1,830. CU. YD.	SOIL EXCAVATION FOR SHAFT INCLUDING HAUL (4007)	AT PER CU. YD.	
28	LUMP SUM	SHORING OR EXTRA EXCAVATION CL. A - FRANCIS AVE BR (4013)	LUMP SUM	
29	LUMP SUM	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 1 (4013)	LUMP SUM	
30	LUMP SUM	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 3 (4013)	LUMP SUM	
31	LUMP SUM	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 4 (4013)	LUMP SUM	
32	LUMP SUM	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 5 (4013)	LUMP SUM	
33	LUMP SUM	SHORING CL. A - RETAINING WALL 2 ()	LUMP SUM	
34	517. LIN. FT.	FURNISHING & PLACING TEMP. CASING FOR 8'-0" DIA. SHAFT (4020)	AT PER LIN. FT.	

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ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
STRUCTURE				
35	130. LIN. FT.	FURNISHING PERMANENT CASING FOR 8'-0" DIAM. SHAFT (4027)	AT PER LIN. FT.	•
36	13. EACH	PLACING PERMANENT CASING FOR 8'-0" DIAM. SHAFT (4034)	AT PER EACH	•
37	336. LIN. FT.	CASING SHORING (4039)	AT PER LIN. FT.	•
38	331,100. POUND	ST. REINF. BAR FOR BRIDGE (4149)	AT PER POUND	•
39	325,000. POUND	ST. REINF. BAR FOR SHAFT (4152)	AT PER POUND	•
40	5,180. LIN. FT.	CSL ACCESS TUBE (4164)	AT PER LIN. FT.	•
41	1,810. CU. YD.	CONC. CLASS 4000 FOR BRIDGE (4322)	AT PER CU. YD.	•
42	1,210. CU. YD.	CONC. CLASS 4000P FOR SHAFT (4168)	AT PER CU. YD.	•
43	3,210. LIN. FT.	PRESTRESSED CONC. GIRDER W53DG (4269)	AT PER LIN. FT.	•
44	7,500. LIN. FT.	PRESTRESSED CONC. GIRDER W41DG (4269)	AT PER LIN. FT.	•
45	CALCULATED	DEFICIENT STRENGTH CONC. PRICE ADJUSTMENT (4219)	CALCULATED	-1.00
46	LUMP SUM	SUPERSTRUCTURE - FRANCIS AVE OVER US 395 & BNSF BRIDGE (4300)	LUMP SUM	•
47	1,010. LIN. FT.	BRIDGE RAILING TYPE WIRE FABRIC FENCE (CURVED) (4410)	AT PER LIN. FT.	•
48	1,046. LIN. FT.	BRIDGE RAILING TYPE WIRE FABRIC FENCE (VERTICAL) (4410)	AT PER LIN. FT.	•

* - SHOW PRICE PER UNIT IN FIGURES ONLY. FIGURES WRITTEN TO THE RIGHT OF THE DOT (DECIMAL) IN THE PRICE PER UNIT COLUMN SHALL BE INTERPRETED AS CENTS.

ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
STRUCTURE				
49	1,756. LIN. FT.	BRIDGE RAILING TYPE SNOW FENCE (4410)	AT PER LIN. FT.	
50	1,010. LIN. FT.	TRAFFIC PEDESTRIAN BARRIER (4114)	AT PER LIN. FT.	
51	1,010. LIN. FT.	PEDESTRIAN BARRIER (4117)	AT PER LIN. FT.	
52	300. LIN. FT.	GEOSYNTHETIC RETAINING WALL PEDESTRIAN BARRIER (4123)	AT PER LIN. FT.	
53	746. LIN. FT.	GEOSYNTHETIC RETAINING WALL COMBINATION BARRIER ()	AT PER LIN. FT.	
54	9,370. SQ. FT.	CONCRETE FASCIA PANEL (4474)	AT PER SQ. FT.	
55	578. SQ. YD.	BRIDGE APPROACH SLAB (5656)	AT PER SQ. YD.	
SURFACING				
56	12,450. TON	CRUSHED SURFACING BASE COURSE (5100)	AT PER TON	
LIQUID ASPHALT				
57	ESTIMATED	ANTI-STRIPPING ADDITIVE (5334)	ESTIMATED	7,020.00
CEMENT CONCRETE PAVEMENT				
58	5,950. CU. YD.	CEMENT CONC. PAVEMENT (5625)	AT PER CU. YD.	
59	CALCULATED	RIDE SMOOTHNESS COMPLIANCE ADJUSTMENT (5637)	CALCULATED	42,840.00
60	CALCULATED	PORTLAND CEMENT CONC. COMPLIANCE ADJUSTMENT (5638)	CALCULATED	-3.00

* - SHOW PRICE PER UNIT IN FIGURES ONLY. FIGURES WRITTEN TO THE RIGHT OF THE DOT (DECIMAL) IN THE PRICE PER UNIT COLUMN SHALL BE INTERPRETED AS CENTS.

ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
CEMENT CONCRETE PAVEMENT				
61	2,070. EACH	EPOXY-COATED TIE BAR WITH DRILL HOLE (5680)	AT PER EACH	
62	8,620. EACH	CORROSION RESISTANT DOWEL BAR (5685)	AT PER EACH	
HOT MIX ASPHALT				
63	7,020. TON	HMA CL. 1/2 IN. PG 70-28 (5767)	AT PER TON	
64	CALCULATED	JOB MIX COMPLIANCE PRICE ADJUSTMENT (5830)	CALCULATED	13,700.00
65	CALCULATED	COMPACTION PRICE ADJUSTMENT (5835)	CALCULATED	9,130.00
66	CALCULATED	ASPHALT COST PRICE ADJUSTMENT (5837)	CALCULATED	11,000.00
67	CALCULATED	CYCLIC DENSITY PRICE ADJUSTMENT (6516)	CALCULATED	-4.00
IRRIGATION AND WATER DISTRIBUTION				
68	LUMP SUM	IRRIGATION SYSTEM (6071)	LUMP SUM	
EROSION CNTL AND ROADSIDE RESTORATION				
69	130. DAY	ESC LEAD (6403)	AT PER DAY	
70	6. EACH	INLET PROTECTION (6471)	AT PER EACH	
71	400. SQ. YD.	STABILIZED CONSTRUCTION ENTRANCE (6468)	AT PER SQ. YD.	
72	2. EACH	TIRE WASH (6469)	AT PER EACH	

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ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
EROSION CNTL AND ROADSIDE RESTORATION				
73	930. LIN. FT.	SILT FENCE (6373)	AT PER LIN. FT.	
74	ESTIMATED	EROSION/WATER POLLUTION CONTROL (6490)	ESTIMATED	2,000.00
75	1,340. LIN. FT.	TEMPORARY CURB (6472)	AT PER LIN. FT.	
76	180. LIN. FT.	TEMPORARY PIPE SLOPE DRAIN (7315)	AT PER LIN. FT.	
77	4.3 ACRE	TACKIFIER (6445)	AT PER ACRE	
78	4.3 ACRE	SEEDING AND MULCHING (6422)	AT PER ACRE	
79	640. CU. YD.	TOPSOIL TYPE B (6410)	AT PER CU. YD.	
TRAFFIC				
80	3,755. LIN. FT.	CEMENT CONC. TRAFFIC CURB AND GUTTER (6700)	AT PER LIN. FT.	
81	170. LIN. FT.	CEMENT CONC. TRAFFIC CURB (6701)	AT PER LIN. FT.	
82	115. LIN. FT.	CONCRETE CURB WALL ()	AT PER LIN. FT.	
83	1,370. LIN. FT.	CEMENT CONC. TRAFFIC ISLAND CURB TYPE 1 ()	AT PER LIN. FT.	
84	1,445. LIN. FT.	CEMENT CONC. TRAFFIC ISLAND CURB TYPE 2 ()	AT PER LIN. FT.	
85	675. SQ. YD.	TRAFFIC ISLAND ()	AT PER SQ. YD.	

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ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
TRAFFIC				
86	14. EACH	ISLAND CHANNELIZATION DEVICE ()	AT PER EACH	
87	250. LIN. FT.	TEMPORARY CONC. BARRIER (6781)	AT PER LIN. FT.	
88	2. EACH	TEMPORARY IMPACT ATTENUATOR (7440)	AT PER EACH	
89	12,260. LIN. FT.	PLASTIC LINE (6807)	AT PER LIN. FT.	
90	2,110. LIN. FT.	PLASTIC WIDE LINE (6818)	AT PER LIN. FT.	
91	1,320. LIN. FT.	PLASTIC CROSSWALK LINE ()	AT PER LIN. FT.	
92	180. LIN. FT.	PAINTED STOP LINE (6858)	AT PER LIN. FT.	
93	280. LIN. FT.	PLASTIC STOP LINE (6859)	AT PER LIN. FT.	
94	6. EACH	PAINTED TRAFFIC ARROW (6860)	AT PER EACH	
95	4. EACH	PLASTIC TRAFFIC ARROW (6833)	AT PER EACH	
96	3. EACH	PAINTED RAILROAD CROSSING SYMBOL (6878)	AT PER EACH	
97	6. EACH	PLASTIC BICYCLE LANE SYMBOL (6867)	AT PER EACH	
98	7,250. LIN. FT.	TEMPORARY PAVEMENT MARKING (6888)	AT PER LIN. FT.	
99	LUMP SUM	PERMANENT SIGNING (6890)	LUMP SUM	

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ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
TRAFFIC				
100	LUMP SUM	TEMPORARY ILLUMINATION SYSTEM (6903)	LUMP SUM	•
101	LUMP SUM	ILLUMINATION SYSTEM (6904)	LUMP SUM	•
102	LUMP SUM	SIGNAL/ELECTRICAL SYSTEM REMOVAL ()	LUMP SUM	•
103	LUMP SUM	TEMPORARY TRAFFIC SIGNAL SYSTEM 1 ()	LUMP SUM	•
104	LUMP SUM	TEMPORARY TRAFFIC SIGNAL SYSTEM 2 ()	LUMP SUM	•
105	LUMP SUM	TRAFFIC SIGNAL SYSTEM 1 (6912)	LUMP SUM	•
106	LUMP SUM	TRAFFIC SIGNAL SYSTEM 2 (6912)	LUMP SUM	•
107	LUMP SUM	COMMUNICATION CONDUIT SYSTEM ()	LUMP SUM	•
108	525. LIN. FT.	CONDUIT PIPE 4 IN. DIAM. (6949)	AT • PER LIN. FT.	•
109	525. LIN. FT.	CONDUIT PIPE 10 IN. DIAM. ()	AT • PER LIN. FT.	•
110	505. LIN. FT.	CONDUIT SYSTEM ()	AT • PER LIN. FT.	•
111	2,000. HOUR	SEQUENTIAL ARROW SIGN (6956)	AT • PER HOUR	•
112	3,000. HOUR	PORTABLE CHANGEABLE MESSAGE SIGN (6993)	AT • PER HOUR	•
113	LUMP SUM	OTHER TEMPORARY TRAFFIC CONTROL (6973)	LUMP SUM	•

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ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
TRAFFIC				
114	500. HOUR	FLAGGERS AND SPOTTERS (6980)	AT PER HOUR	
115	200. HOUR	OTHER TRAFFIC CONTROL LABOR (6992)	AT PER HOUR	
116	LUMP SUM	TRAFFIC CONTROL SUPERVISOR (6974)	LUMP SUM	
117	220. SQ. FT.	CONSTRUCTION SIGNS CLASS A (6982)	AT PER SQ. FT.	
OTHER ITEMS				
118	LUMP SUM	TYPE B PROGRESS SCHEDULE (7003)	LUMP SUM	
119	4,040. CU. YD.	STRUCTURE EXCAVATION CLASS B INCL. HAUL (7006)	AT PER CU. YD.	
120	26,080. SQ. FT.	SHORING OR EXTRA EXCAVATION CLASS B (7008)	AT PER SQ. FT.	
121	46. CU. YD.	GRAVEL BACKFILL FOR DRAIN (7014)	AT PER CU. YD.	
122	1,750. SQ. YD.	CEMENT CONC. SIDEWALK (7055)	AT PER SQ. YD.	
123	525. SQ. YD.	CEMENT CONC. DRIVEWAY ENTRANCE TYPE COS (7059)	AT PER SQ. YD.	
124	1. EACH	CEMENT CONC. CURB RAMP TYPE 1 (7058)	AT PER EACH	
125	15. EACH	CEMENT CONC. CURB RAMP TYPE 2 (7058)	AT PER EACH	
126	2. EACH	CEMENT CONC. CURB RAMP TYPE 3 (7058)	AT PER EACH	

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ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
OTHER ITEMS				
127	4. SQ. FT.	DETECTABLE WARNING SURFACE (7054)	AT PER SQ. FT.	
128	545. LIN. FT.	COATED CHAIN LINK FENCE TYPE 3 (7085)	AT PER LIN. FT.	
129	23. EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE (7098)	AT PER EACH	
130	2. EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE (7106)	AT PER EACH	
131	325. TON	ROCK FOR ROCK WALL (7166)	AT PER TON	
132	240. TON	BACKFILL FOR ROCK WALL (7167)	AT PER TON	
133	1. EACH	ADJUST INLET (9602)	AT PER EACH	
134	2. EACH	CONNECTION TO DRAINAGE STRUCTURE (9605)	AT PER EACH	
135	3. EACH	ADJUST MANHOLE (3080)	AT PER EACH	
136	9. EACH	MANHOLE 48 IN. DIAM. TYPE 1 (7360)	AT PER EACH	
137	1. EACH	ADJUST DRYWELL ()	AT PER EACH	
138	LUMP SUM	CLEANING EXISTING DRAINAGE STRUCTURE (7350)	LUMP SUM	
139	1,600. HOUR	TRAINING (7400)	AT PER HOUR	
140	ESTIMATED	ROADSIDE CLEANUP (7480)	ESTIMATED	10,000.00

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ITEM NO.	PLAN QUANTITY	ITEM DESCRIPTION (STANDARD ITEM NUMBER)	PRICE PER UNIT DOLLARS *	TOTAL AMOUNT DOLLARS
OTHER ITEMS				
141	ESTIMATED	REIMBURSEMENT FOR THIRD PARTY DAMAGE (7725)	ESTIMATED	5.00
142	CALCULATED	MINOR CHANGE (7728)	CALCULATED	-6.00
143	CALCULATED	FUEL COST ADJUSTMENT (7730)	CALCULATED	67,960.00
144	CALCULATED	STEEL COST ADJUSTMENT (7731)	CALCULATED	5,000.00
145	CALCULATED	AGGREGATE COMPLIANCE PRICE ADJUSTMENT (7732)	CALCULATED	-5.00
146	LUMP SUM	SPCC PLAN (7736)	LUMP SUM	•
147	LUMP SUM	FIELD OFFICE BUILDING (7500)	LUMP SUM	•
148	9,910. SQ. FT.	GEOSYNTHETIC RETAINING WALL (7559)	AT PER SQ. FT. •	•
149	5,720. CU. YD.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL (7567)	AT PER CU. YD. •	•
CONTRACT TOTAL:				\$ •

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SUMMARY OF QUANTITIES

DOT_RGG900

10/3/2013

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION 1-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION 1-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 2	GROUP 3	GROUP 3	GROUP 4			
							FR LINE 4+23.00 TO 25+02.00	MKT LINE 20+00.00 TO 25+28.00	FRD LINE 10+00.00 TO 27+06.17	RETAINING WALL 1	RETAINING WALL 2	RETAINING WALL 3	RETAINING WALL 4	MKT LINE 25+28.00 TO 31+54.00	FSC LINE 19+65.60 TO 22+37.00	BNA LINE 80+00.00 TO 83+62.00	RETAINING WALL 5	FRANCIS UNDER XING	REIMBURS. FOR THIRD PARTY DAMAGE		
PREPARATION																					
1	LUMP SUM	LUMP SUM	LUMP SUM	0001	L.S.	MOBILIZATION	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.	L.S.			
2	0.20	0.20		0025	ACRE	CLEARING AND GRUBBING	0.10						0.10								
3	37.00	37.00		0049	EACH	REMOVING DRAINAGE STRUCTURE	26.00	4.00					7.00								
4	LUMP SUM	LUMP SUM		0050	L.S.	REMOVAL OF STRUCTURE AND OBSTRUCTION	L.S.						L.S.								
5	200000.00		200000.00	0256	DOL	REMOVING SHAFT OBSTRUCTIONS													200,000.00		
6	LUMP SUM		LUMP SUM	0071	L.S.	REMOVING EXISTING BRIDGE NO. 480000852													L.S.		
7	40.00	40.00		0100	S.Y.	REMOVING CEMENT CONC. SIDEWALK	20.00	10.00	10.00												
8	546.00	546.00		0150	S.Y.	REMOVING TRAFFIC ISLAND			546.00												
9	1640.00	1640.00		0170	L.F.	REMOVING GUARDRAIL	1,640.00														
10	4.00	4.00		0182	EACH	REMOVING GUARDRAIL ANCHOR	4.00														
11	1020.00	1020.00		0187	L.F.	REMOVING PAINT LINE			1,020.00												
12	1850.00	1850.00		0203	S.F.	REMOVING PAINTED CROSSWALK LINE			1,850.00												
13	90.00	90.00			L.F.	REMOVING PAINTED STOP LINE			90.00												
14	2440.00	2440.00		0220	L.F.	REMOVING CHAIN LINK FENCE	2,250.00	50.00					140.00								
15	LUMP SUM	LUMP SUM		0250	L.S.	REMOVAL AND DISPOSAL OF ASBESTOS MATERIAL							L.S.								
GRADING																					
16	57400.00	57400.00		0310	C.Y.	ROADWAY EXCAVATION INCL. HAUL	45,600.00	1,900.00	2,900.00				6,600.00		400.00						
17	20500.00	20500.00		0470	C.Y.	EMBANKMENT COMPACTION	14,500.00	100.00	4,700.00				800.00		400.00						
DRAINAGE																					
18	1220.00	1020.00	200.00	1160	L.F.	UNDERDRAIN PIPE 6 IN. DIAM.	250.00			40.00	40.00	70.00	620.00					200.00			
STORM SEWER																					
19	39.00	39.00		3090	EACH	CATCH BASIN TYPE 4	21.00	11.00					7.00								
20	1.00	1.00		3091	EACH	CATCH BASIN TYPE 1	1.00														
21	3314.00	3314.00		3151	L.F.	TESTING STORM SEWER PIPE	1,840.00	744.00					730.00								
22	2668.00	2668.00		3541	L.F.	SCHEDULE A STORM SEWER PIPE 12 IN. DIAM.	1,582.00	570.00					516.00								
23	646.00	646.00		3542	L.F.	SCHEDULE A STORM SEWER PIPE 18 IN. DIAM.	258.00	174.00					214.00								
24	4.00	4.00			EACH	POND CONC. PAD	3.00						1.00								
25	1.00	1.00			EACH	POND OUTFALL	1.00														
STRUCTURE																					
26	10900.00	3900.00	7000.00	4006	C.Y.	STRUCTURE EXCAVATION CLASS A INCL. HAUL				200.00	200.00	300.00	3,200.00				2,300.00	4,700.00			
27	1830.00		1830.00	4007	C.Y.	SOIL EXCAVATION FOR SHAFT INCLUDING HAUL														1,830.00	
28	LUMP SUM		LUMP SUM	4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - FRANCIS AVE BR														L.S.	
29	LUMP SUM		LUMP SUM	4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 1														L.S.	
30	LUMP SUM	LUMP SUM		4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 3							L.S.								
31	LUMP SUM	LUMP SUM		4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 4							L.S.								
32	LUMP SUM	LUMP SUM		4013	L.S.	SHORING OR EXTRA EXCAVATION CL. A - RETAINING WALL 5							L.S.								
33	LUMP SUM	LUMP SUM			L.S.	SHORING CL. A - RETAINING WALL 2							L.S.								
34	517.00		517.00	4020	L.F.	FURNISHING & PLACING TEMP. CASING FOR 8'-0" DIA. SHAFT														517.00	
35	130.00		130.00	4027	L.F.	FURNISHING PERMANENT CASING FOR 8'-0" DIA. SHAFT														130.00	
36	13.00		13.00	4034	EACH	PLACING PERMANENT CASING FOR 8'-0" DIA. SHAFT														13.00	
37	336.00		336.00	4039	L.F.	CASING SHORING														336.00	
38	331100.00		331100.00	4149	LB.	ST. REINF. BAR FOR BRIDGE														331,100.00	
39	325000.00		325000.00	4152	LB.	ST. REINF. BAR FOR SHAFT														325,000.00	

GROUP LEGEND :

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	000	3200CT	*	STATE,FEDERAL,AVISTA UTB 1032
2	000	3200CY	*	STATE,FEDERAL,AVISTA UTB 1032
3	395	321101	**	STATE,FEDERAL,AVISTA UTB 1032
4	395	321101	**	STATE

04/20/12	MULTIPLE ITEMS ADDED TO SPEC 1-07.2(2)	LK	REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 28 SUMMARY OF QUANTITIES	SQ1
04/27/12	COLUMN 3 CHG TO GRP 2, COLUMN 8 .9 CHG TO GRP 1	LK	10	WA	NH-0395(098)			SHEET
05/02/12	QUAN CHNG BID ITEMS: 5, 27, 34, 35, 38, 39, 40, AND 42	LK						3
DATE	REVISION	BY						OF
						215		
						SHEETS		

SUMMARY OF QUANTITIES

DOT_RGG900

10/3/2013

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION 1-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION 1-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 2	GROUP 3	GROUP 3	GROUP 4				
							FR LINE 4+23.00 TO 25+02.00	MKT LINE 20+00.00 TO 25+28.00	FRD LINE 10+00.00 TO 27+06.17	RETAINING WALL 1	RETAINING WALL 2	RETAINING WALL 3	RETAINING WALL 4	MKT LINE 25+28.00 TO 31+54.00	FSC LINE 19+65.60 TO 22+37.00	BNA LINE 80+00.00 TO 83+62.00	RETAINING WALL 5	FRANCIS UNDER XING	REIMBURS. FOR THIRD PARTY DAMAGE			
40	5180.00		5180.00	4164	L.F.	CSL ACCESS TUBE																5,180.00
41	1810.00		1810.00	4322	C.Y.	CONC. CLASS 4000 FOR BRIDGE																1,810.00
42	1210.00		1210.00	4168	C.Y.	CONC. CLASS 4000P FOR SHAFT																1,210.00
43	3210.00		3210.00	4269	L.F.	PRESTRESSED CONC. GIRDER W53DG																3,210.00
44	7500.00		7500.00	4269	L.F.	PRESTRESSED CONC. GIRDER W41DG																7,500.00
45	-1.00		-1.00	4219	DOL	DEFICIENT STRENGTH CONC. PRICE ADJUSTMENT																-1.00
46	LUMP SUM		LUMP SUM	4300	L.S.	SUPERSTRUCTURE - FRANCIS AVE OVER US 395 & BNSF BRIDGE																L.S.
47	1010.00		1010.00	4410	L.F.	BRIDGE RAILING TYPE WIRE FABRIC FENCE (CURVED)																1,010.00
48	1046.00	1046.00		4410	L.F.	BRIDGE RAILING TYPE WIRE FABRIC FENCE (VERTICAL)	422.00			18.00	18.00	30.00	558.00									
49	1756.00	746.00	1010.00	4410	L.F.	BRIDGE RAILING TYPE SNOW FENCE	122.00			18.00	18.00	30.00	558.00									1,010.00
50	1010.00		1010.00	4114	L.F.	TRAFFIC PEDESTRIAN BARRIER																1,010.00
51	1010.00		1010.00	4117	L.F.	PEDESTRIAN BARRIER																1,010.00
52	300.00	300.00		4123	L.F.	GEOSYNTHETIC RETAINING WALL PEDESTRIAN BARRIER	300.00															
53	746.00	746.00			L.F.	GEOSYNTHETIC RETAINING WALL COMBINATION BARRIER	122.00			18.00	18.00	30.00	558.00									
54	9370.00	7400.00	1970.00	4474	S.F.	CONCRETE FASCIA PANEL				450.00	500.00	860.00	5,590.00			1,970.00						
55	578.00		578.00	5656	S.Y.	BRIDGE APPROACH SLAB																578.00
SURFACING																						
56	12450.00	12450.00		5100	TON	CRUSHED SURFACING BASE COURSE	4,480.00	1,190.00	4,790.00					1,840.00	150.00							
LIQUID ASPHALT																						
57	7020.00	7020.00		5334	DOL	ANTI-STRIPPING ADDITIVE	2,900.00	930.00	1,800.00					1,390.00								
CEMENT CONCRETE PAVEMENT																						
58	5950.00	5950.00		5625	C.Y.	CEMENT CONC. PAVEMENT	4,000.00	770.00						1,180.00								
59	42840.00	42840.00		5637	DOL	RIDE SMOOTHNESS COMPLIANCE ADJUSTMENT	28,800.00	5,540.00						8,500.00								
60	-3.00	-3.00		5638	DOL	PORTLAND CEMENT CONC. COMPLIANCE ADJUSTMENT	-1.00	-1.00						-1.00								
61	2070.00	2070.00		5680	EACH	EPOXY-COATED TIE BAR WITH DRILL HOLE	1,210.00	290.00						570.00								
62	8620.00	8620.00		5685	EACH	CORROSION RESISTANT DOWEL BAR	6,120.00	1,270.00						1,230.00								
HOT MIX ASPHALT																						
63	7020.00	7020.00		5767	TON	HMA CL. 1/2 IN. PG 70-28	2,900.00	930.00	1,800.00					1,390.00								
64	13700.00	13700.00		5830	DOL	JOB MIX COMPLIANCE PRICE ADJUSTMENT	5,700.00	1,800.00	3,500.00					2,700.00								
65	9130.00	9130.00		5835	DOL	COMPACTION PRICE ADJUSTMENT	3,770.00	1,210.00	2,340.00					1,810.00								
66	11000.00	11000.00		5837	DOL	ASPHALT COST PRICE ADJUSTMENT	4,500.00	1,500.00	2,800.00					2,200.00								
67	-4.00	-4.00		6516	DOL	CYCLIC DENSITY PRICE ADJUSTMENT	-1.00	-1.00	-1.00					-1.00								
IRRIGATION AND WATER DISTRIBUTION																						
68	LUMP SUM	LUMP SUM		6071	L.S.	IRRIGATION SYSTEM	L.S.															
EROSION CNTL AND ROADSIDE RESTORATION																						
69	130.00	130.00		6403	DAY	ESC LEAD	130.00															
70	6.00	6.00		6471	EACH	INLET PROTECTION		6.00														
71	400.00	400.00		6468	S.Y.	STABILIZED CONSTRUCTION ENTRANCE	400.00															
72	2.00	2.00		6469	EACH	TIRE WASH	2.00															
73	930.00	930.00		6373	L.F.	SILT FENCE	930.00															
74	2000.00	2000.00		6490	DOL	EROSION/WATER POLLUTION CONTROL	2,000.00															
75	1340.00	1340.00		6472	L.F.	TEMPORARY CURB	1,340.00															
76	180.00	180.00		7315	L.F.	TEMPORARY PIPE SLOPE DRAIN	180.00															

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	000	3200CT	*	STATE,FEDERAL,AVISTA UTB 1032
2	000	3200CY	*	STATE,FEDERAL,AVISTA UTB 1032
3	395	321101	**	STATE,FEDERAL,AVISTA UTB 1032
4	395	321101	**	STATE

04/20/12	MULTIPLE ITEMS ADDED TO SPEC 1-07.2(2)	LK	REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 28.1 SUMMARY OF QUANTITIES	SQ2
04/27/12	COLUMN 3 CHG TO GRP 2, COLUMN 8 .9 CHG TO GRP 1	LK	10	WA	NH-0395(098)			SHEET
05/02/12	QUAN CHNG BID ITEMS: 5, 27, 34, 35, 38, 39, 40, AND 42	LK						4
DATE	REVISION	BY						OF
						215		
						SHEETS		

SUMMARY OF QUANTITIES

DOT_RGG900

10/3/2013

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION 1-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION 1-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 2	GROUP 3	GROUP 3	GROUP 4				
							FR LINE 4+23.00 TO 25+02.00	MKT LINE 20+00.00 TO 25+28.00	FRD LINE 10+00.00 TO 27+06.17	RETAINING WALL 1	RETAINING WALL 2	RETAINING WALL 3	RETAINING WALL 4	MKT LINE 25+28.00 TO 31+54.00	FSC LINE 19+65.60 TO 22+37.00	BNA LINE 80+00.00 TO 83+62.00	RETAINING WALL 5	FRANCIS UNDER XING	REIMBURS. FOR THIRD PARTY DAMAGE			
77	4.30	4.30		6445	ACRE	TACKIFIER	2.10		2.00					0.10		0.10						
78	4.30	4.30		6422	ACRE	SEEDING AND MULCHING	2.10		2.00					0.10		0.10						
79	640.00	640.00		6410	C.Y.	TOPSOIL TYPE B	190.00						425.00	25.00								
TRAFFIC																						
80	3755.00	3755.00		6700	L.F.	CEMENT CONC. TRAFFIC CURB AND GUTTER	2,435.00	670.00						650.00								
81	170.00	170.00		6701	L.F.	CEMENT CONC. TRAFFIC CURB	115.00	40.00						15.00								
82	115.00	115.00			L.F.	CONCRETE CURB WALL								115.00								
83	1370.00	1370.00			L.F.	CEMENT CONC. TRAFFIC ISLAND CURB TYPE 1	980.00	180.00						210.00								
84	1445.00	1445.00			L.F.	CEMENT CONC. TRAFFIC ISLAND CURB TYPE 2	460.00	180.00						520.00	285.00							
85	675.00	675.00			S.Y.	TRAFFIC ISLAND	195.00	50.00						280.00	150.00							
86	14.00	14.00			EACH	ISLAND CHANNELIZATION DEVICE	6.00	2.00						4.00	2.00							
87	250.00	250.00		6781	L.F.	TEMPORARY CONC. BARRIER			250.00													
88	2.00	2.00		7440	EACH	TEMPORARY IMPACT ATTENUATOR			2.00													
89	12260.00	12260.00		6807	L.F.	PLASTIC LINE	9,310.00	1,000.00						1,710.00	240.00							
90	2110.00	2110.00		6818	L.F.	PLASTIC WIDE LINE	1,170.00	230.00						420.00	290.00							
91	1320.00	1320.00			L.F.	PLASTIC CROSSWALK LINE	480.00	200.00						360.00	280.00							
92	180.00	180.00		6858	L.F.	PAINTED STOP LINE			180.00													
93	280.00	280.00		6859	L.F.	PLASTIC STOP LINE	140.00	50.00						60.00	30.00							
94	6.00	6.00		6860	EACH	PAINTED TRAFFIC ARROW			6.00													
95	4.00	4.00		6833	EACH	PLASTIC TRAFFIC ARROW	2.00							2.00								
96	3.00	3.00		6878	EACH	PAINTED RAILROAD CROSSING SYMBOL			3.00													
97	6.00	6.00		6867	EACH	PLASTIC BICYCLE LANE SYMBOL	5.00	1.00														
98	7250.00	7250.00		6888	L.F.	TEMPORARY PAVEMENT MARKING			7,250.00													
99	LUMP SUM	LUMP SUM		6890	L.S.	PERMANENT SIGNING	L.S.		L.S.													
100	LUMP SUM	LUMP SUM		6903	L.S.	TEMPORARY ILLUMINATION SYSTEM			L.S.													
101	LUMP SUM	LUMP SUM		6904	L.S.	ILLUMINATION SYSTEM	L.S.															
102	LUMP SUM	LUMP SUM			L.S.	SIGNAL/ELECTRICAL SYSTEM REMOVAL	L.S.															
103	LUMP SUM	LUMP SUM			L.S.	TEMPORARY TRAFFIC SIGNAL SYSTEM 1	L.S.															
104	LUMP SUM	LUMP SUM			L.S.	TEMPORARY TRAFFIC SIGNAL SYSTEM 2	L.S.															
105	LUMP SUM	LUMP SUM		6912	L.S.	TRAFFIC SIGNAL SYSTEM 1	L.S.															
106	LUMP SUM	LUMP SUM		6912	L.S.	TRAFFIC SIGNAL SYSTEM 2	L.S.															
107	LUMP SUM	LUMP SUM			L.S.	COMMUNICATION CONDUIT SYSTEM	L.S.															
108	525.00		525.00	6949	L.F.	CONDUIT PIPE 4 IN. DIAM.															525.00	
109	525.00		525.00		L.F.	CONDUIT PIPE 10 IN. DIAM.															525.00	
110	505.00		505.00		L.F.	CONDUIT SYSTEM															505.00	
111	2000.00	2000.00		6956	HR	SEQUENTIAL ARROW SIGN			2,000.00													
112	3000.00	3000.00		6993	HR	PORTABLE CHANGEABLE MESSAGE SIGN	3,000.00															
113	LUMP SUM	LUMP SUM		6973	L.S.	OTHER TEMPORARY TRAFFIC CONTROL			L.S.													
114	500.00	500.00		6980	HR	FLAGGERS AND SPOTTERS	500.00															
115	200.00	200.00		6992	HR	OTHER TRAFFIC CONTROL LABOR	200.00															
116	LUMP SUM	LUMP SUM		6974	L.S.	TRAFFIC CONTROL SUPERVISOR	L.S.															
117	220.00	220.00		6982	S.F.	CONSTRUCTION SIGNS CLASS A	170.00	25.00						25.00								
OTHER ITEMS																						
118	LUMP SUM	LUMP SUM		7003	L.S.	TYPE B PROGRESS SCHEDULE	L.S.															
119	4040.00	4040.00		7006	C.Y.	STRUCTURE EXCAVATION CLASS B INCL. HAUL	1,820.00	710.00						1,360.00	150.00							
120	26080.00	26080.00		7008	S.F.	SHORING OR EXTRA EXCAVATION CLASS B	11,730.00	4,400.00						9,230.00	720.00							
121	46.00	38.00	8.00	7014	C.Y.	GRAVEL BACKFILL FOR DRAIN	8.00			2.00	2.00	3.00	23.00					8.00				

GROUP LEGEND :

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	000	3200CT	*	STATE,FEDERAL,AVISTA UTB 1032
2	000	3200CY	*	STATE,FEDERAL,AVISTA UTB 1032
3	395	321101	**	STATE,FEDERAL,AVISTA UTB 1032
4	395	321101	**	STATE

04/20/12	MULTIPLE ITEMS ADDED TO SPEC 1-07.2(2)	LK	REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 28.2 SUMMARY OF QUANTITIES	SQ3
04/27/12	COLUMN 3 CHG TO GRP 2, COLUMN 8 .9 CHG TO GRP 1	LK	10	WA	NH-0395(098)			SHEET
05/02/12	QUAN CHNG BID ITEMS: 5, 27, 34, 35, 38, 39, 40, AND 42	LK						5
								OF
DATE	REVISION	BY			000000		215	
							SHEETS	

SUMMARY OF QUANTITIES

DOT_RGG900

10/3/2013

ITEM NO	TOTAL QUANTITY	SUB-TOTAL * SECTION 1-07.2(1) OF STANDARD SPECS	SUB-TOTAL ** SECTION 1-07.2(2) OF STANDARD SPECS	STD. ITEM NO.	UNIT	ITEM	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 1	GROUP 2	GROUP 3	GROUP 3	GROUP 4				
							FR LINE 4+23.00 TO 25+02.00	MKT LINE 20+00.00 TO 25+28.00	FRD LINE 10+00.00 TO 27+06.17	RETAINING WALL 1	RETAINING WALL 2	RETAINING WALL 3	RETAINING WALL 4	MKT LINE 25+28.00 TO 31+54.00	FSC LINE 19+65.60 TO 22+37.00	BNA LINE 80+00.00 TO 83+62.00	RETAINING WALL 5	FRANCIS UNDER XING	REIMBURS. FOR THIRD PARTY DAMAGE			
122	1750.00	1750.00		7055	S.Y.	CEMENT CONC. SIDEWALK	1,030.00	365.00						355.00								
123	525.00	525.00		7059	S.Y.	CEMENT CONC. DRIVEWAY ENTRANCE TYPE COS	235.00	145.00						145.00								
124	1.00	1.00		7058	EACH	CEMENT CONC. CURB RAMP TYPE 1		1.00														
125	15.00	15.00		7058	EACH	CEMENT CONC. CURB RAMP TYPE 2	9.00	3.00	2.00					1.00								
126	2.00	2.00		7058	EACH	CEMENT CONC. CURB RAMP TYPE 3	2.00															
127	4.00	4.00		7054	S.F.	DETECTABLE WARNING SURFACE			4.00													
128	545.00	545.00		7085	L.F.	COATED CHAIN LINK FENCE TYPE 3	545.00															
129	23.00	23.00		7098	EACH	COATED END, GATE, CORNER, PULLPOST FOR CHAIN LINK FENCE	23.00															
130	2.00	2.00		7106	EACH	DOUBLE 20 FT. COATED CHAIN LINK GATE	2.00															
131	325.00	325.00		7166	TON	ROCK FOR ROCK WALL							220.00	105.00								
132	240.00	240.00		7167	TON	BACKFILL FOR ROCK WALL							160.00	80.00								
133	1.00	1.00		9602	EACH	ADJUST INLET							1.00									
134	2.00	2.00		9605	EACH	CONNECTION TO DRAINAGE STRUCTURE		2.00														
135	3.00	3.00		3080	EACH	ADJUST MANHOLE		2.00					1.00									
136	9.00	9.00		7360	EACH	MANHOLE 48 IN. DIAM. TYPE 1	5.00	2.00					2.00									
137	1.00	1.00			EACH	ADJUST DRYWELL	1.00															
138	LUMP SUM	LUMP SUM		7350	L.S.	CLEANING EXISTING DRAINAGE STRUCTURE		L.S.														
139	1600.00		1600.00	7400	HR	TRAINING															1,600.00	
140	10000.00	10000.00		7480	DOL	ROADSIDE CLEANUP	10,000.00															
141	5.00		5.00	7725	DOL	REIMBURSEMENT FOR THIRD PARTY DAMAGE															5.00	
142	-2.00	-1.00	-1.00	7728	DOL	MINOR CHANGE	-1.00														-1.00	
143	67960.00	26310.00	41650.00	7730	DOL	FUEL COST ADJUSTMENT	26,160.00								150.00	41,650.00						
144	5000.00		5000.00	7731	DOL	STEEL COST ADJUSTMENT															5,000.00	
145	-2.00	-2.00		7732	DOL	AGGREGATE COMPLIANCE PRICE ADJUSTMENT	-1.00								-1.00							
146	LUMP SUM	LUMP SUM		7736	L.S.	SPCC PLAN		L.S.														
147	LUMP SUM		LUMP SUM	7500	L.S.	FIELD OFFICE BUILDING															L.S.	
148	9910.00	8130.00	1780.00	7559	S.F.	GEOSYNTHETIC RETAINING WALL				480.00	530.00	900.00	6,220.00							1,780.00		
149	5720.00	4660.00	1060.00	7567	C.Y.	GRAVEL BORROW FOR STRUCTURAL EARTH WALL INCL. HAUL				270.00	310.00	90.00	3,990.00							1,060.00		

GROUP LEGEND :

GROUP NUMBER	SR	CONTROL SECTION	TAX SCHEDULE	FUND PARTICIPANTS
1	000	3200CT	*	STATE,FEDERAL,AVISTA UTB 1032
2	000	3200CY	*	STATE,FEDERAL,AVISTA UTB 1032
3	395	321101	**	STATE,FEDERAL,AVISTA UTB 1032
4	395	321101	**	STATE

04/20/12	MULTIPLE ITEMS ADDED TO SPEC 1-07.2(2)	LK	REGION	STATE	FEDERAL AID PROJECT. NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE 28.3 SUMMARY OF QUANTITIES	SQ4
04/27/12	COLUMN 3 CHG TO GRP 2, COLUMN 8 .9 CHG TO GRP 1	LK	10	WA	NH-0395(098)			SHEET
05/02/12	QUAN CHNG BID ITEMS: 5, 27, 34, 35, 38, 39, 40, AND 42	LK						6
DATE	REVISION	BY						OF
						215	SHEETS	

PS&E JOB NO: Z009
CONTRACT NO: 000000
WORK ORDER#: XL3832

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
ESTIMATES AND BIDS ANALYSIS SYSTEM
*** WORK CLASSIFICATIONS ***

DATE: 10/16/2013 PAGE: 1
TIME: 12:51 VER: 1
DOT_RGG400

	CLASS AMOUNT	PERCENT	MULTIPLE CLASS ITEMS
MOBILIZATION	1,436,255.00	9.18%	
CLASS 1	1,610,514.00	10.29%	2, 3, 4, 6, 7, 8, 9, 10, 69, 70, 71, 72, 73, 74, 75, 76, 77, 79, 118, 133, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149
CLASS 2	250,380.00	1.60%	
CLASS 4	497,146.00	3.18%	
CLASS 5	1,263,837.00	8.08%	
CLASS 6	8,648,254.00	55.27%	24, 25, 27, 34, 35, 36, 37, 43, 44
CLASS 9	368,800.00	2.36%	
CLASS 12	42,940.00	0.27%	
CLASS 15	180,091.00	1.15%	18, 68
CLASS 16	70,000.00	0.45%	
CLASS 17	278,795.00	1.78%	
CLASS 19	37,300.00	0.24%	131, 132
CLASS 24	27,370.00	0.17%	14
CLASS 27	39,900.00	0.26%	
CLASS 34	10,750.00	0.07%	78
CLASS 35	735,880.00	4.70%	50, 51, 52, 53
CLASS 37	5,000.00	0.03%	
CLASS 38	16,580.00	0.11%	11, 12, 13
CLASS 44	10,000.00	0.06%	
CLASS 53	116,900.00	0.75%	
CONTRACT TOTAL:	<u>\$15,646,692.00</u>		

Prequalification Work Classes

- Class 1* **Clearing, Grubbing, Grading and Draining**
Removal of tree stumps, shrubs, modification of the ground surface by cuts and fills, excavating of earth materials, and the placement of draining structures.
- Class 2* **Production and Placing of Crushed Materials**
Production and placing crushed surfacing materials and gravel.
- Class 3* **Bituminous Surface Treatment**
Placing of crushed materials with asphaltic application.
- Class 4* **Asphalt Concrete Paving**
Production and placing Asphalt Concrete Plant Mix Pavement.
- Class 5* **Cement Concrete Paving**
Production and placing cement concrete pavement.
- Class 6* **Bridges and Structures**
Construction of bridges, walls, and other major structures of timber, steel, and concrete.
- Class 7* **Buildings**
Construction of buildings and related structures within the right-of-way and major reconstruction and remodeling of such buildings.
- Class 8* **Painting**
Painting bridges, buildings, and related structures.
- Class 9* **Traffic Signals**
Installation of traffic signal and control systems.
- Class 10* **Structural Tile Cleaning**
Cleaning tunnels, large buildings and structures and storage tanks.
- Class 11* **Guardrail**
Construction of a rail secured to uprights and erected as a barrier between, or beside lanes of a highway.
- Class 12* **Pavement Marking (Excluding Painting)**
Thermoplastic markings, stripes, bars, symbols, etc. Traffic buttons, lane markers, guide posts.
- Class 13* **Demolition**
Removal of timber, steel, and concrete structures and obstructions.
- Class 14* **Drilling and Blasting**
Controlled blasting of rock and obstructions by means of explosives.
- Class 15* **Sewers and Water Mains**
Draining, pipe jacking, water systems, pumping stations, storm drainage systems, sewer rehabilitation, sewage pumping stations, pressurized lines.
- Class 16* **Illumination and General Electric**
Highway illumination, navigational lighting, wiring, junction boxes, conduit installation.
- Class 17* **Cement Concrete Curb and Gutter**
Sidewalks, spillways, driveways, monument cases and covers, right-of-way markers, traffic curbs, and gutters.
- Class 18* **Asphalt Concrete Curb and Gutter**
Sidewalks, spillways, driveways, monument cases and covers, right-of-way markers, traffic curbs, and gutters.
- Class 19* **Riprap and Rock Walls**
Mortar, rubble, and masonry walls; rock retaining walls, and placing of large broken stone on earth surfaces for protection against the action of water.
- Class 20* **Concrete Structures Except Bridges**
Cast-in place median barrier, prestressing, post-tensioned structures, footings, prefabricated panels and walls, retaining walls, and ramps, foundations, and concrete slope protection.
- Class 21* **Tunnels and Shaft Excavation**
Tunnel excavation, rock tunneling, and soft bore tunneling.
- Class 22* **Piledriving**
Driving concrete, steel, and timber piles.
- Class 23* **Concrete Surface Treatment**
Exposed aggregate, fractured-in and rope textured finishes; waterproofing concrete surfaces (clear or pigmented sealer).
- Class 24* **Fencing**
Wire and metal fencing, glare screens.
- Class 25* **Bridge Deck Repair**
Bridge expansion joint repair and modification, bridge deck resurfacing and repair.
- Class 26* **Deck Seal**
Waterproof membrane.
- Class 27* **Signing**
Sign structures and signs.
- Class 28* **Drilled Large Diameter Slurry Shafts**
Drilled Shafts 4' diameter or larger and greater than 15' deep when excavation is performed utilizing the wet method and concrete is placed by tremie methods under a mineral, polymer, or water slurry.
- Class 29* **Slurry Diaphragm and Cut-Off Walls**
Slurry excavation and the construction of structural concrete walls and slurry cut-off walls.
- Class 30* **Surveying**
Highway construction surveying.

- Class 31* **Water Distribution and Irrigation**
Irrigation systems and heavy duty water distribution.
- Class 32* **Landscaping**
Landscaping irrigation, planting, sodding, seeding, fertilizing, mulching, herbicide application, insecticide application, weed control, mowing, liming, soil binder, topsoil.
- Class 33* **Engineering**
Work other than surveying, including engineering calculations, drawing and other related work for highway construction.
- Class 34* **Erosion Control**
Seeding, fertilizing, mulching, slope protection, topsoil application, hydroseeding, soil stabilization, soil sampling.
- Class 35* **Precast Median Barrier**
A concrete barrier that is cast and cured in other than its final position used to divide the median of two adjacent highways or temporarily placed to divert traffic in construction zones.
- Class 36* **Permanent Tie-Back Anchor**
Installation of permanent rock and soil anchors, soldier piles and timber lagging. Soldier pile tie-back anchor wall construction.
- Class 37* **Impact Attenuators**
Installation of approved protective systems filled with sand, water, foam, or other substances which prevent errant vehicles from impacting roadside hazards.
- Class 38* **Paint Striping**
Painting bars, letters, symbols, and striping.
- Class 39* **Wire Mesh Slope Protection**
The installation of a zinc-coated steel wire mesh anchored by wire rope and reinforced concrete posts or anchor rods. Used for dampening the effects of rolling rocks onto the highway. Slope scaling, horizontal drains, rock dowels, and rock bolts for slope stabilization.
- Class 40* **Gabion and Gabion Construction**
Construction of walls made with containers of galvanized steel hexagonal wire mesh and filled with stone.
- Class 41* **Intelligent Transportation Systems (ITS)**
Traffic Sensors Systems, Highway Advisory Radios, Environmental Sensing Stations, Variable Message Signs, Non-Fiber Optic Based Closed Circuit Television and Video Systems.
- Class 42* **Electronics-Fiber Optic Based Communications Systems**
Design and installation of fiber optic based communication systems.
- Class 43* **Mechanical**
Plumbing work and the installation of heating or air conditioning units.
- Class 44* **Asbestos Abatements**
Asbestos Abatement (L & I Certified Workers).
- Class 45* **Hazardous Waste Removal**
The containment, cleanup, and disposal of toxic materials. Companies seeking this classification shall have full-time personnel with current hazardous waste training (certification).
- Class 46* **Concrete Restoration**
Pavement subseal, cement concrete repair, epoxy coatings, epoxy repair, masonry repair, masonry cleaning, special coatings, epoxy injection, gunite, shotcrete grouting, pavement jacking, gunite repair, and pressure grouting.
- Class 47* **Concrete Sawing, Coring, and Grooving**
Concrete sawing, concrete planning and grooving, bump grinding, joint repair, concrete coring, rumble strip.
- Class 48* **Dredging**
Excavating underwater materials.
- Class 49* **Marine Work**
Underwater surveillance, testing, repair, subaquatic construction, anchors, and cable replacement, floating concrete pontoon repairs and modifications, disassembly and assembly of floating concrete pontoons.
- Class 50* **Ground Modification**
Pressure Grouting, blast densification, stone column, jet grouting, compaction, dynamic compaction, soil mixing, gravel drain.
- Class 51* **Well Drilling**
Drilling wells, installing pipe casing and pumping stations.
- Class 52* **Sewage Disposal**
Hauling and disposing liquid and solid wastes.
- Class 53* **Traffic Control**
Providing piloted traffic control, traffic control labor, and maintenance and protection of traffic.
- Class 54* **Railroad Construction**
Construction of railroad subgrade, placing of ballast, ties, and track and other items related to railroad work.
- Class 55* **Steel Fabrication**
Welding of steel members, heat straightening steel.
- Class 56* **Street Cleaning**
Street sweeping with self-propelled sweeping equipment.
- Class 57* **Materials Transporting**
Truck hauling.
- Class 58* **Sand Blasting and Steam Cleaning**
Steam cleaning, sand blasting, shot blasting, and water blasting.

PS&E JOB NO: 10Z012 CONTRACT NO: 008017
 WORK ORDER#: IR0151 REGION NO: 6

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION
 CONTRACT ADMINISTRATION & PAYMENT SYSTEM
 * * * LUMP SUM BREAKDOWN * * *

DATE: 10/06/2010 PAGE: 1
 TIME: 13:50 VER: 4
 DOT_RGG800

ITEM NO.	STD. ITEM	ITEM DESCRIPTION	UNIT MEAS	PLANNED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED AMOUNT
54		ACCESS ROAD REHAB - SITE QS-AD-74	L.S.			10,000.00
		WATER TRUCK AND OPERATER	HR	8.00	50.0000	400.00
		GRADER AND OPERATER	HR	12.00	100.0000	1,200.00
		VIBRATORY ROLLER AND OPERATER	HR	12.00	100.0000	1,200.00
		CLEARING	ACRE	3.39	500.0000	1,695.00
					TOTAL =	4,495.00
55		EXCESS MATERIAL REIMBURSMENT	EST.			27,000.00
		EXCESS MATERIAL 10% BY QUANTITY	C.Y.	6,000.00	4.5000	27,000.00
					TOTAL =	27,000.00

MISCELLANEOUS PS&E CONSIDERATIONS

[Division 7](#) of the Plans Preparation Manual has an alphabetical listing of miscellaneous items that should be reviewed during PS&E preparation.

Some areas to be especially watchful for are as follows:

- Agreements
- Asphalt Concrete For Pre-leveling
- Earthwork Measurement
- Force Account Work
- Liquidated Damages
- Lump Sum Bid Items
- Pipe Alternates
- Proprietary Items
- Shoring and Cribbing Items
- State Force Work
- Structure Excavation
- Utilities
- Working Days

Review the compatibility of bridges and adjacent roadway for the following items:

- A. Profile
- B. Superelevation
- C. Alignment
- D. Drainage
- E. Paving width
- F. Guardrail/Traffic Barrier connections
- G. Approach slabs

With structures, additional items to check include:

- A. Gravel Backfill for Walls
- B. Slope protection
- C. Riprap
- D. Conduit
- E. Log of Test Boring
- F. Under-drain pipe
- G. Gravel Backfill for Drain

Eliminate extraneous information from plan sheets. Show only what is required to ensure that you get the required product.

There should be no conflicts between the information on plan sheets and the details.

You will need details for non-standard work. Remember, however, that typically the detail is sufficient; you do not have to provide too much explanation about how to construct an item. The contractor might determine a better method for building the item, which translates to a better bid price. If you overly describe the construction and it isn't satisfactory, the WSDOT assumes the blame and costs for rework.

If a Standard Plan will work, don't draw details. If you modify a Standard Plan, make sure that the detail references the Standard Plan for any information or requirements that is not shown on the plan detail.

Verify that all the work falls within the project and construction limits.

Keep good records with backup/supporting data on how you determined the quantities and costs. These can be extremely useful to the construction office in cases where there is an overrun or under-run.

ADDENDUMS

DELETIONS

The item, line, figure, or detail to be deleted is completely removed from the sheet. The area where the deletion occurred shall NOT contain any addendum clouds. The deletion is to be noted in the revision block which shall be shaded. When a plan sheet requires a P.E.'s stamp, the revision block date is to be dated on or before the date it is signed by the P.E. authorizing the change.

On Summary of Quantity, Qtabs, Structure Notes, and Sign Specification sheets, delete the line item(s), but leave the row or column in place as a blank placeholder.

REVISIONS/ADDITIONS

The revision/addition note shall be placed in the revision block, and all revisions, including additions, shall be shaded.

ADDED/REPLACEMENT SHEETS

An added sheet is a sheet that previously did not exist. It is to be numbered and inserted in its proper location, adding an alphabetical character to its sheet designation; for example, the "A" in 67, 67A, 68.

A replacement sheet is a sheet on which the changes are so massive, a cloud(s) would cover a substantial portion (over 50%) of the sheet, or the changes could not be clearly defined with a cloud(s).

These sheets are noted in the revision block by the note "Added Sheet" or "Replacement Sheet," whichever is applicable. Only the revision block shall be shaded.

ADDENDUM CLOUD

(For Plan/Profile/Section/Detail Sheets Only)

On CAD-produced sheets (plan view, profile view, sections view, and detail), use the addendum cloud tool to identify an item(s) or area(s) to be changed and addendum shade tool for tabular or schedule revisions per the Plans Preparation Manual.

Refer any questions about addendum cloud(s) to the HQ CAE Office.

SHADING

(For Plan/Profile/Section/Detail Sheets Only)

On Summary of Quantity, Qtabs, Structure Notes, and Sign Specification sheets, shade the cell(s) and revision block with a gray color per the Plans Preparation Manual.

All PS&E submittals for Contract Advertisement and addenda shall be only original plots from printers that use stippling to produce gray. Reproductions or photocopies will not be allowed as they make poor quality prints when reproduced. Some variation in shade density may be noticed when comparing output from various printers.

EXAMPLES

The addendum examples are provided to show several of the many possible addenda that may need to be sent to amend a project once it has been advertised (Ad).

In the example titled "SR 161, Jovita Blvd. to SR 18 Widening - Stage I, Addendum No.3" is an actual addendum that amended the Special Provisions, the Proposal, the Wage Rates and the Plans of a past contract while it was on Ad.

Contract Plans and Estimate Preparation and Review Course

The example provides notes to the designer/reader (see explanations in parentheses) describing how the changes need to be explained or shown on various documents, in order to provide the necessary information to the bidders/plan holders.

NOTE: In this example, the proposal, plans, and wage rate attachments showing the changes are not included.

Department of Transportation
Olympia, Washington 98504

ATTENTION: All Bidders and Planholders

SR 161
JOVITA BLVD. TO SR 18
WIDEN - STAGE 1
STPF-1009(002) & STATE

Addendum No.3

The Special Provisions, Plans, Proposal, and Wage Rates for this project are amended as follows:

Special Provisions

1. On page 20, lines 31 and 32 are deleted.

1. Lines are deleted. No other corrections necessary.

2. On page 90, lines 34 through 47 are revised to read as follows.

Construction Requirements

Straw Bale Barriers

Bales shall be placed in a single row with ends of adjacent bales tightly abutting one another. Straw bales shall be installed so that the bindings are oriented around the sides. The bales shall be securely anchored by at least 2 stakes or steel reinforcing bars [~~rebars~~] driven through the bale with the top flush with the top of the bales.

Straw bales shall be removed when approved by the Engineer:.

2. Parts of a paragraph are revised and a new sentence is added. The underline denotes added words and the strikethrough with brackets denotes deleted words. Usually whole paragraphs are shown in the addendum for ease of understanding the revision.

3. On page 94, the following is added after line 13:

The fourteenth paragraph of Section 1-07.15 is revised to read:

If done according to the approved Plan or Engineer's orders, temporary water pollution/erosion control work will be measured and paid for:

1. At unit contract prices if the work differs from specified Contract work, or
2. By force account as specified in Section 1-09:6: if riot covered by contract items.

For the purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount for the item "Temporary Water Pollution/Erosion Control" in the bid proposal to become a part of the total bid by the Contractor.

3. Additional specifications are added to an existing Special Provision.

4. On page 132, lines 25 through 33 are deleted and replaced with the following:
 - 3.

Section 6-02.5 is supplemented with the following:

All costs for plugging existing bridge drains shall be included in the lump sum contract price for "Superstructure - Bridge No. 161 /102 Widening".

4. Several lines are deleted and replaced with the corrected version. Used when there are extensive changes and it is clearer than to use the underline and strikethrough with brackets method described in No.2.

5. On page 179, line 38 through page 182, line 8, the Special Provision **COALESCING PLATE OIL-WATER SEPARATOR** is deleted.

5. A whole Special Provision is deleted.

6. The following Special Provision is added:

SANITARY SEWER

Description

Section 7-17.1 is supplemented with the following:

This work consists of protecting sanitary sewers.

Materials

Section 7-17.2 is supplemented with the following:

Lean Concrete:	f, + 500 psi minimum
Structural Concrete:	Class 3000
Extruded Polystyrene Insulation:	60 psi minimum compressive strength
Steel Plate:	ASTM A-36

Construction Requirements

Section 7-17.3 is supplemented with the following:

The sanitary sewer protection shall be constructed as detailed in the Plans. Concrete shall be placed on undisturbed soil. The concrete shall be allowed to cure three days prior to setting the storm sewer pipe and backfilling.

Measurement

Section 7-17.4 is supplemented with the following:

Sanitary sewer protection will be measured per each when constructed.

Payment

Section 7-17.5 is supplemented with the following:

12. "Sanitary Sewer Protection", per each.

6. A new Special Provision is added to the Contract Provisions. Note that this type of revision is not inserted into a specific location in the Contract Provisions.

Plans

1. On sheets 66 and 67, all references to signs 1 A through SA are deleted.

1. Minor deletions are to be made by the Plan Holder.

2. Sheet 85 is deleted. The reference to sheet 85 is deleted from the Index sheet.

2. A sheet is deleted. The revision to the Index sheet is made by the Plan Holder.

3. On sheet 120, *DRAINAGE DETAIL*, Underdrain Pipe is revised to read Underdrain Pipe 6 In. Diam.

3. Minor revisions are to be made by the Plan Holder.

4. Plan sheets 3, 5, 8, 31, 45, 46, 57, 112, and 137 are revised as shaded and noted on the attached sheets.

4. A list of Plan sheets that have been revised by the Department/Consultant and included as part of the Addendum package. Note: Revisions and Additions are shaded. Deletions are NOT shaded, Also, the Region/Consultant shall note what revisions were made in the Revision block.

Proposal

1. On page 1: Item No's. 2, 4, and 7, the PLAN QUANTITY is revised.

1. A listing of revisions made to the Proposal.

2. On page 2
Item No. 22 is revised in its entirety.
Item No. 23, the PLAN QUANTITY, ITEM DESCRIPTION, and STANDARD ITEM NUMBER are revised.

*2. Major revision to a bid item. This would include the Following revisions:
Plan Quantity or Units of Measure
Item Description
Standard Item No. (if applicable)*

3. On page 3, Item No. 36 is DELETED.

3. An item is deleted. The Proposal will read DELETED ITEM in the Item Description block and the Total Amount Dollars block will be filled with zeros.

4. On page 9, Item No. 122, the TOTAL AMOUNT DOLLARS is revised.

4. The Total Amount Dollars block was revised for a force account item.

5. On added page 11 , Item No's. 143, 144, and 145 are added.

5. New items are added after the last item in the original Proposal when the project went on Ad. DO NOT insert new items throughout the Proposal.

Wage Rates

1. The following pages have been revised.
Federal Wage Rates: Page 1, General Decision WA 95000102/23/96 WA1
WA 950001 , MOD 13, Revised 1/12/96

State Wage Rates: Page 1, Revised 1/ 12/96

Policy Statement: Page 1, Revised 1/12/96

Supplement To Wage Rates

1. A listing of revised pages for each part of the wage rate package that is revised. .

Bidders are instructed to revise sheets 66, 67, and 120 of the Plans as revised sheets have not been prepared for attachment to this Addendum.

Sheets 3, 5, 8, 31, 45, 46, 57, 112, and 137 of the Plans, pages 1, 2, 3, 9, and 11 of the Proposal, page 1 of the Federal Wage Rates, page 1 of the State Wage Rates, and page 1 of the Policy Statement have been revised and are attached.

Bidders shall furnish the Secretary of Transportation with evidence of the receipt of this Addendum. This Addendum will be incorporated in the contract when awarded' and when formally executed.

Pasco Bakotich, P.E.
State Design Engineer

Attachment:

Sheets 3, 5, 8, 31, 45, 46, 57, 112, and 137 of the Plans (Rev. January 12, 1996)

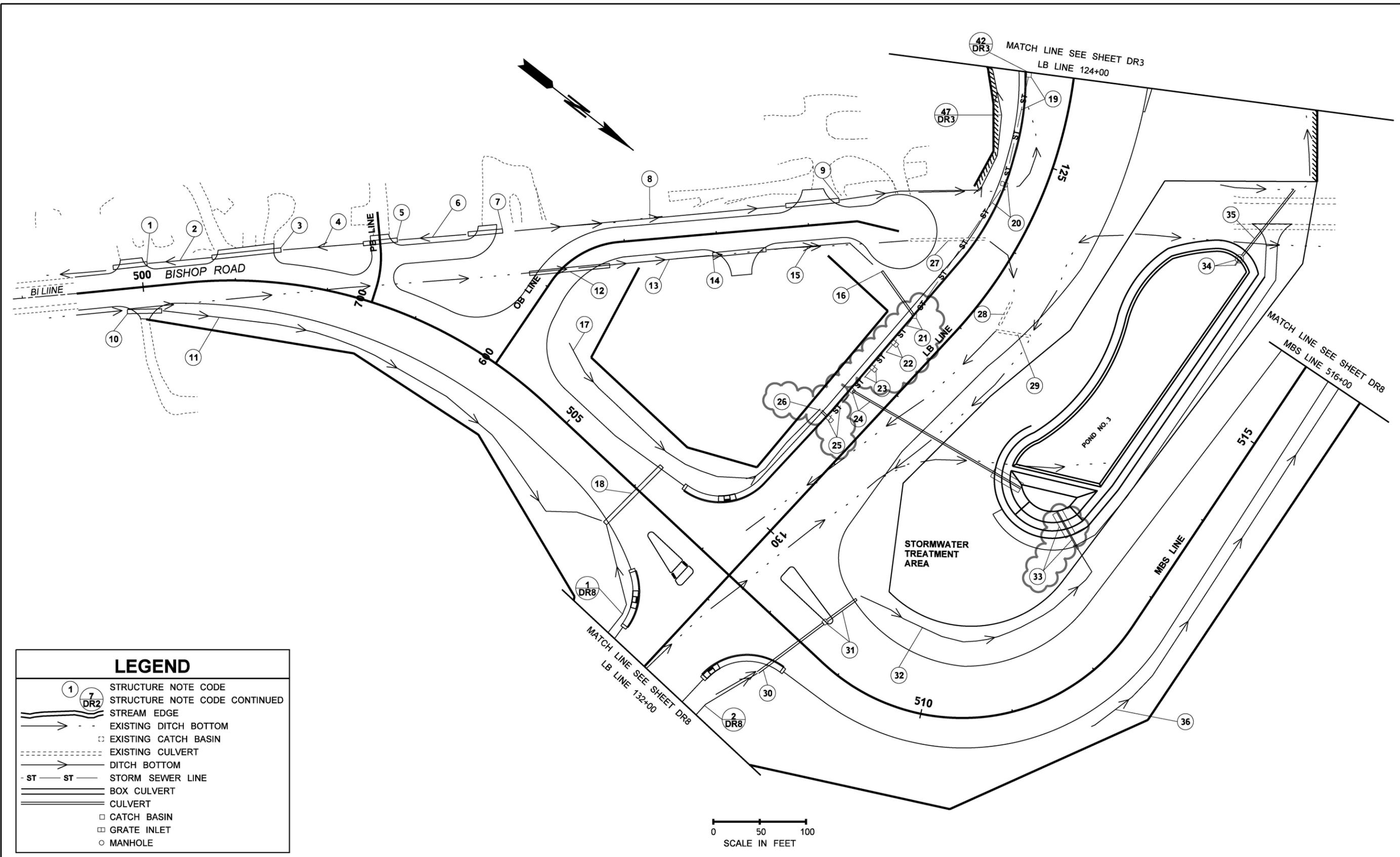
Pages 1, 2, 3, 9, and 11 of the Proposal (Rev. January 12, 1996)

Page 1 of the Federal Wage Rates (Rev. January 12, 1996)

Page 1 of the State Wage Rates (Rev. January 12, 1996)

Page 1 of the Policy Statement, Supplement To Wage Rates (Rev. January 12, 1996)

Make the Revision date the same for all attachments. Usually this date will be the Friday of Addendum deadline week.



LEGEND	
	STRUCTURE NOTE CODE
	STRUCTURE NOTE CODE CONTINUED
	STREAM EDGE
	EXISTING DITCH BOTTOM
	EXISTING CATCH BASIN
	EXISTING CULVERT
	DITCH BOTTOM
	STORM SEWER LINE
	BOX CULVERT
	CULVERT
	CATCH BASIN
	GRATE INLET
	MANHOLE

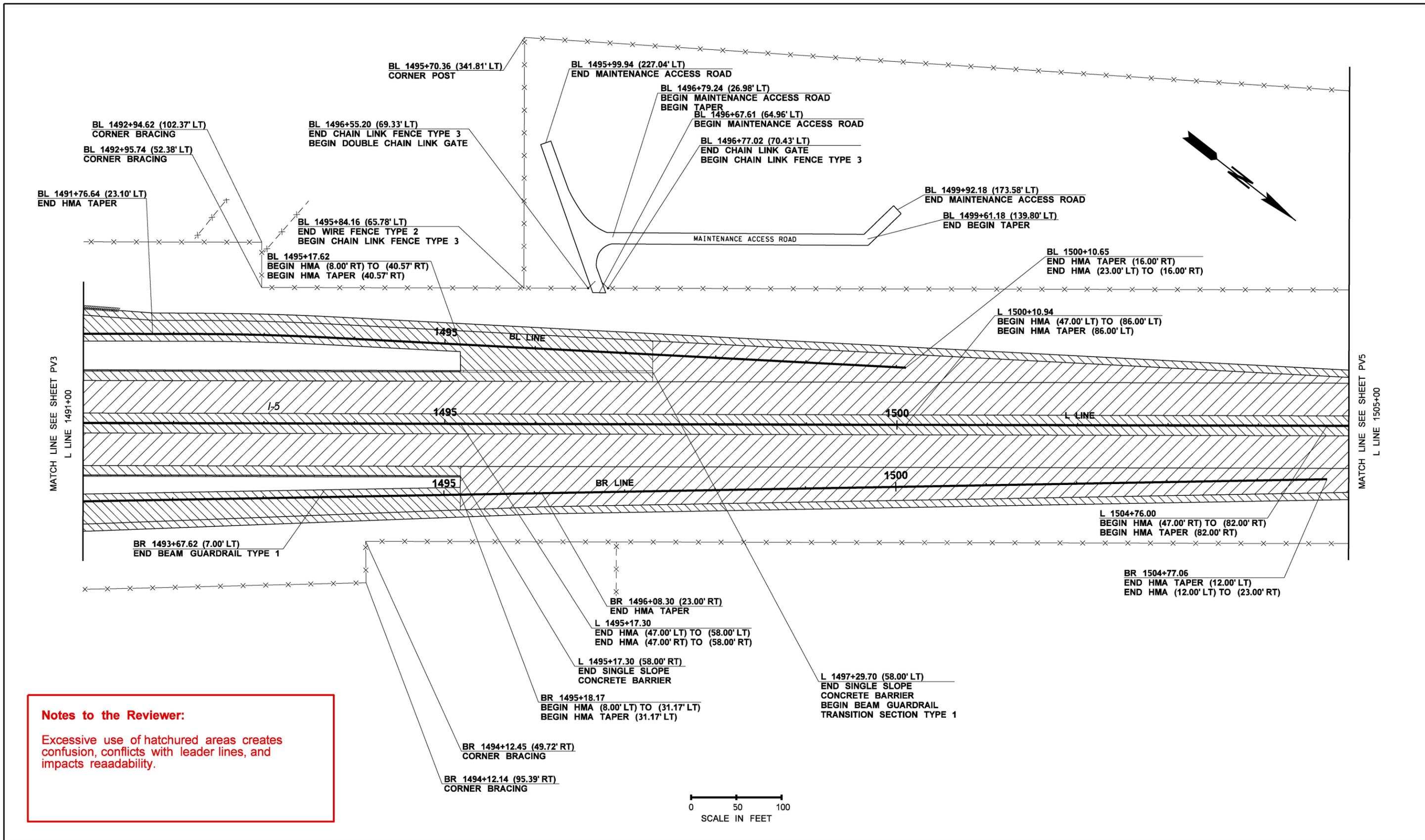


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TIME: 1:44:46 PM	DATE: 11/20/2013	JOB NUMBER 00Z000		CONTRACT NO.		LOCATION NO. XL-1234						SHEET OF SHEETS	
PLOTTED BY: HIIIC	DESIGNED BY: DESIGNER	PROJ. ENGR. PROJECT ENGINEER AD1 - DRAINAGE SYSTEM CHANGE		DATE: 07/25/2009	TK	REVISION		DATE	DATE	DRAINAGE PLAN			
ENTERED BY: CAD OPERATOR	CHECKED BY: TEAM LEAD	REGIONAL ADM. REGIONAL ADM.		REVISION	DATE	BY							

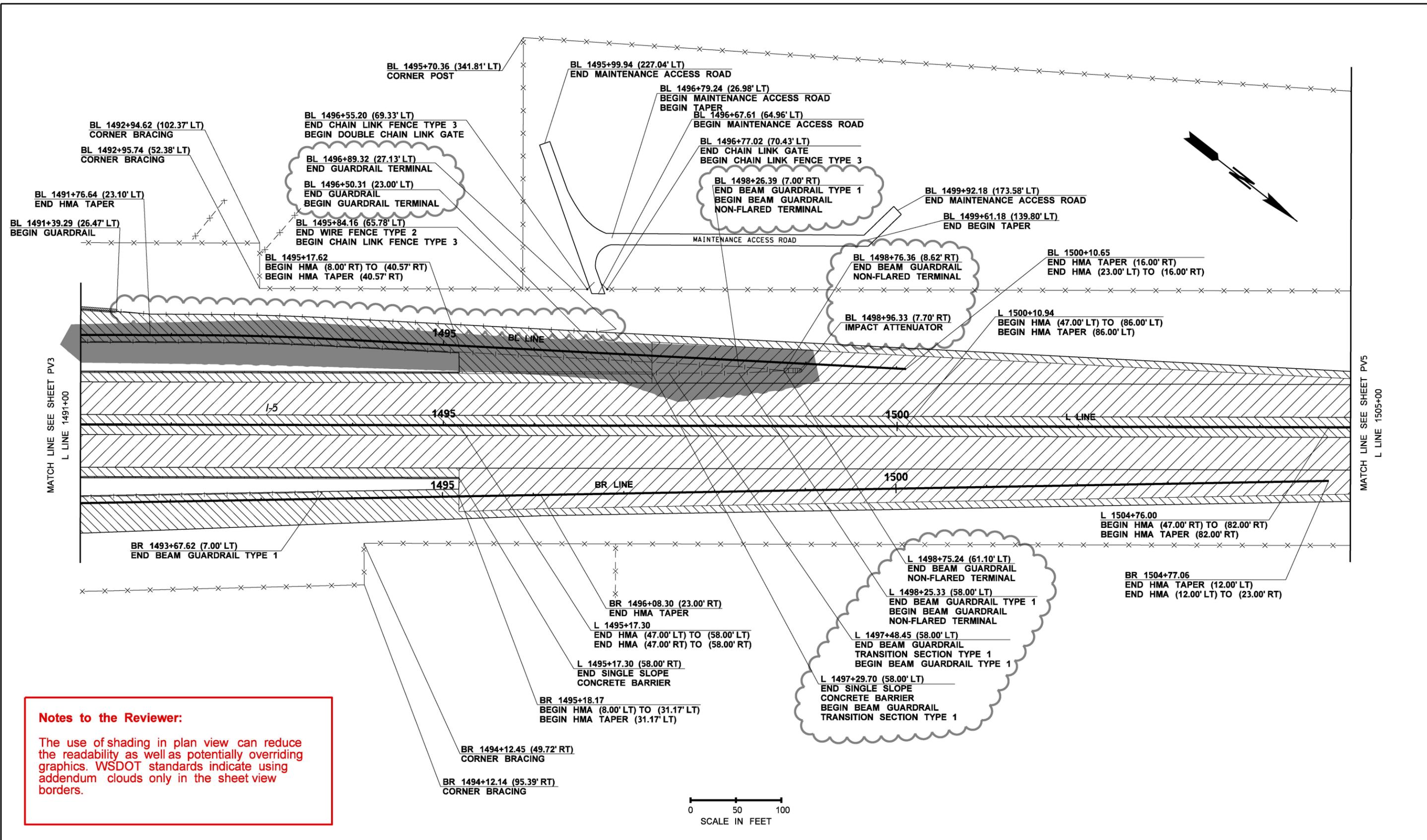
APPENDIX A

THINGS TO AVOID

The following examples show practices to avoid.



FILE NAME	F:\CPEP_ReviewCourse\DGNS\Clint\CPEP_F00i.dgn			REGION NO.	STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE i PAVING PLAN	PLAN REF NO
TIME	11:27:28 AM			10	WASH	NH-0000(000)			i
DATE	9/18/2013			JOB NUMBER					SHEET
PLOTTED BY	HIIICI			CONTRACT NO.		XL-1234		OF	
DESIGNED BY	DESIGNER							SHEETS	
ENTERED BY	CAD OPERATOR								
CHECKED BY	TEAM LEAD								
PROJ. ENGR.	PROJECT ENGINEER								
REGIONAL ADM.	REGIONAL ADM.	REVISION	DATE	BY					



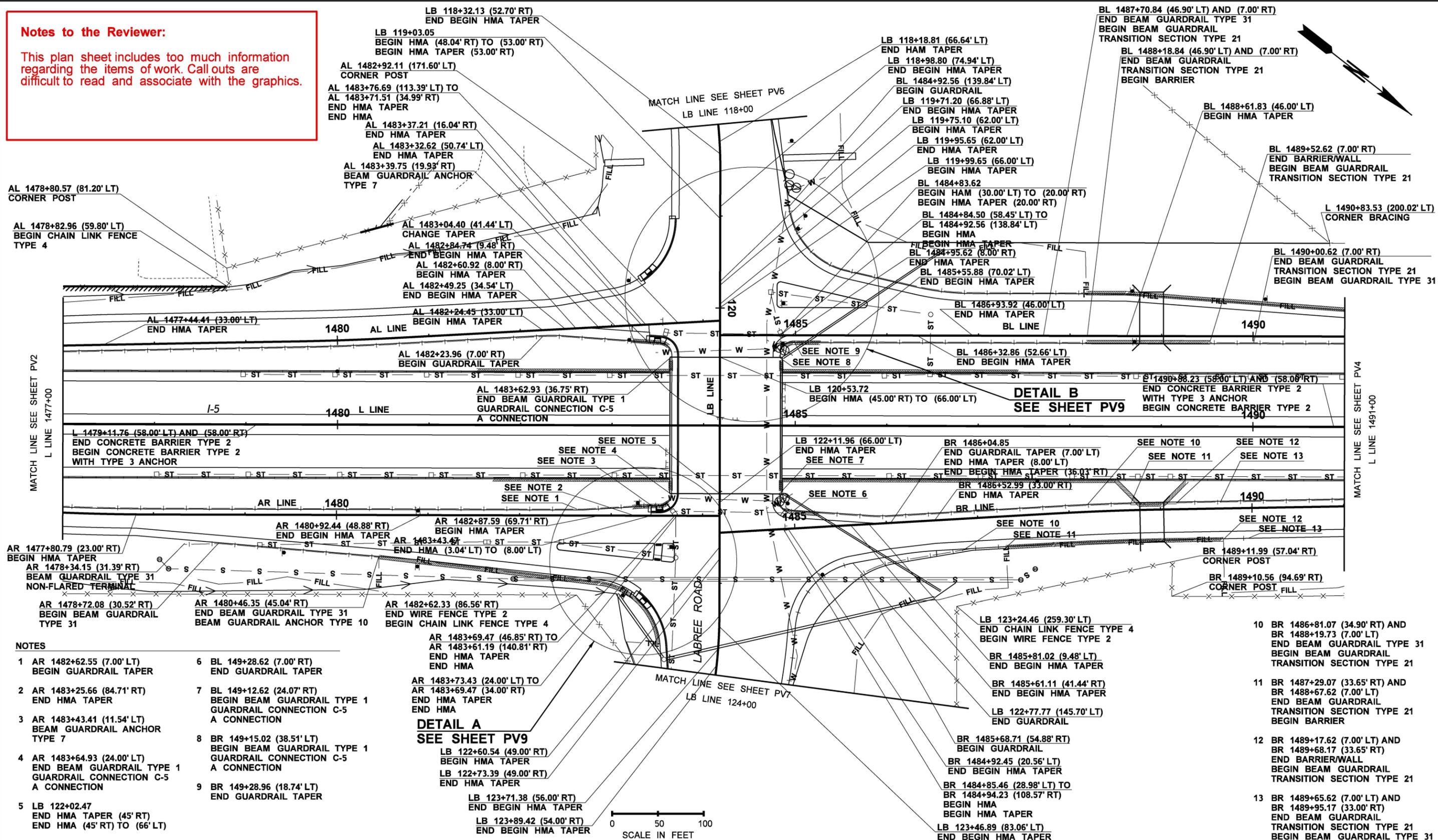
Notes to the Reviewer:

The use of shading in plan view can reduce the readability as well as potentially overriding graphics. WSDOT standards indicate using addendum clouds only in the sheet view borders.

FILE NAME E:\HIIICL\ Training\ General\ CPEP_ReviewCourse\ Support\ DGNs\ CPEP_F00ii.dgn		REGION NO. 10	STATE WASH	FED.AID PROJ.NO. NH-0000(000)	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE ii	PLAN REF NO. ii
TIME 1:28:31 PM	DATE 11/20/2013	JOB NUMBER 00Z000	CONTRACT NO.	LOCATION NO. XL-1234			SHEET OF SHEETS
PLOTTED BY HIIICI	DESIGNED BY DESIGNER	PROJ. ENGR. PROJECT ENGINEER	ADDED GUARD RAIL IMPACT ATTENUATOR	3/1/2013	TK	PAVING PLAN	
ENTERED BY CAD OPERATOR	CHECKED BY TEAM LEAD	REGIONAL ADM. REGIONAL ADM.	REVISION	DATE	BY		

Notes to the Reviewer:

This plan sheet includes too much information regarding the items of work. Call outs are difficult to read and associate with the graphics.



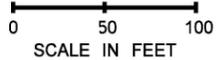
- NOTES**
- 1 AR 1482+62.55 (7.00' LT) BEGIN GUARDRAIL TAPER
 - 2 AR 1483+25.66 (84.71' RT) END HMA TAPER
 - 3 AR 1483+43.41 (11.54' LT) BEAM GUARDRAIL ANCHOR TYPE 7
 - 4 AR 1483+64.93 (24.00' LT) END BEAM GUARDRAIL TYPE 1 GUARDRAIL CONNECTION C-5 A CONNECTION
 - 5 LB 122+02.47 END HMA TAPER (45' RT) END HMA (45' RT) TO (66' LT)
 - 6 BL 149+28.62 (7.00' RT) END GUARDRAIL TAPER
 - 7 BL 149+12.62 (24.07' RT) BEGIN BEAM GUARDRAIL TYPE 1 GUARDRAIL CONNECTION C-5 A CONNECTION
 - 8 BR 149+15.02 (38.51' LT) BEGIN BEAM GUARDRAIL TYPE 1 GUARDRAIL CONNECTION C-5 A CONNECTION
 - 9 BR 149+28.96 (18.74' LT) END GUARDRAIL TAPER

DETAIL A
SEE SHEET PV9

- AR 1483+69.47 (46.85' RT) TO AR 1483+61.19 (140.81' RT) END HMA TAPER END HMA
- AR 1483+73.43 (24.00' LT) TO AR 1483+69.47 (34.00' RT) END HMA TAPER END HMA
- LB 122+60.54 (49.00' RT) BEGIN HMA TAPER
- LB 122+73.39 (49.00' RT) END HMA TAPER
- LB 123+71.38 (56.00' RT) END BEGIN HMA TAPER
- LB 123+89.42 (54.00' RT) END BEGIN HMA TAPER

DETAIL B
SEE SHEET PV9

- LB 120+53.72 BEGIN HMA (45.00' RT) TO (66.00' LT)
- BR 1486+04.85 END GUARDRAIL TAPER (7.00' LT) END HMA TAPER (8.00' LT) END BEGIN HMA TAPER (36.03' RT)
- BR 1486+52.99 (33.00' RT) END HMA TAPER
- BR 1489+11.99 (57.04' RT) CORNER POST
- BR 1489+10.56 (94.69' RT) CORNER POST FILL
- BR 1485+81.02 (9.48' LT) END BEGIN HMA TAPER
- BR 1485+61.11 (41.44' RT) END BEGIN HMA TAPER
- LB 122+77.77 (145.70' LT) END GUARDRAIL
- BR 1485+68.71 (54.88' RT) BEGIN GUARDRAIL
- BR 1484+92.45 (20.56' LT) END BEGIN HMA TAPER
- BR 1484+85.46 (28.98' LT) TO BR 1484+94.23 (108.57' RT) BEGIN HMA BEGIN HMA TAPER
- LB 123+46.89 (83.06' LT) END BEGIN HMA TAPER
- 10 BR 1486+81.07 (34.90' RT) AND BR 1488+19.73 (7.00' LT) END BEAM GUARDRAIL TYPE 31 BEGIN BEAM GUARDRAIL TRANSITION SECTION TYPE 21
- 11 BR 1487+29.07 (33.65' RT) AND BR 1488+67.62 (7.00' LT) END BEAM GUARDRAIL TRANSITION SECTION TYPE 21 BEGIN BARRIER
- 12 BR 1489+17.62 (7.00' LT) AND BR 1489+68.17 (33.65' RT) END BARRIER/WALL BEGIN BEAM GUARDRAIL TRANSITION SECTION TYPE 21
- 13 BR 1489+65.62 (7.00' LT) AND BR 1489+95.17 (33.00' RT) END BEAM GUARDRAIL TRANSITION SECTION TYPE 21 BEGIN BEAM GUARDRAIL TYPE 31



FILE NAME	E:\HIIICL\Training\General\CEP_ReviewCourse\Support\IGNs\CEP_F00iii.dgn			REGION NO.	STATE	FED.AID PROJ.NO.	Washington State Department of Transportation	CONTRACT PLANS AND ESTIMATE PREPARATION AND REVIEW COURSE FIGURE iii PAVING PLAN	PLAN REF NO
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DATE	11/20/2013			JOB NUMBER	00Z000	LOCATION NO.			XL-1234
PLOTTED BY	HIIIC			CONTRACT NO.				OF	
DESIGNED BY	DESIGNER							SHEETS	
ENTERED BY	CAD OPERATOR								
CHECKED BY	TEAM LEAD								
PROJ. ENGR.	PROJECT ENGINEER								
REGIONAL ADM.	REGIONAL ADM.			REVISION	DATE	BY			